HOW TO GET YOUR MAC ORGANIZED

Macworld

www.macworld.com | March 2007

iPhone

APPLE'S NEW CALLING

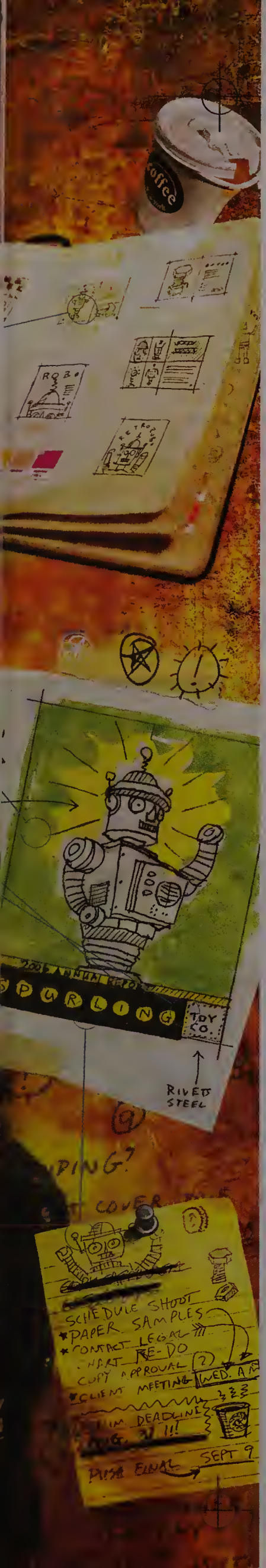
The Handheld Mac?

- Powered by OS X
- Multitouch Screen
- Video iPod
- Safari and Mail Inside
- Oh Yeah, and It's a Phone!

Apple TV
iTunes in Your Living Room

Put some music on.
Built-in clip. 240 songs.* Up to 12-hour battery. Just $79. One size fits all.
iPod shuffle
TM & ©2007 Apple Computer, Inc. *Based on 4 min. song & 128 Kbps AAC encoding. SRP 1GB model. Battery life may vary. Don't steal music. 1-800-MY-APPLE or visit www.apple.com/ipodshuffle.

TOY CO.
RIVETS
2006
SPARKLING
COMPS DUE MONDAY!
PANTONE® 2728 C
PANTONE® 109 U
EYES/ LIGHTS ON BLACK



EPSON
EXCEED YOUR VISION

Now your ideas can look as good in your hand as they do in your head.

- Media Handling from 4"x6" up to 17"x22"
- Printing resolutions up to 2880 x 1440 dpi
- PostScript® Language Level 3™ compatibility
- Accurate Epson UltraChrome K3™ Inks
- SWOP® certified output
- PANTONE-licensed ColorBurst® RIP*
- Built-in Ethernet for easy networking
- *$1,495* Professional Edition

The new Epson Stylus® Pro 3800. Your perfect design deserves a perfect print.

The creative process can be exciting. It can also be frustrating. Because eventually, you have to find a way to get all those wild ideas out of your head and onto paper. Designed to meet your highest standards, the Epson Stylus Pro 3800 is loaded with features that will showcase your hard work and deliver the best possible image quality at a very affordable price. Imagine that. For more information, call 800.241.5373 and be sure to read the interview with designer Richard Borge at **www.epson.com/3800**.

*Optimized for Windows XP and Mac OS X. Actual price may vary. Epson, Epson Stylus, Exceed Your Vision and Epson UltraChrome K3 are trademarks/registered trademarks of the Seiko Epson Corporation. All other trademarks are properties of their respective companies. ©2006 Epson America, Inc. Photo © Sam Yocum. Graphic Design © Richard Borge

ColorBurst RIP with PANTONE Digital Color SWOP CERTIFIED SYSTEM

EPSON ULTRACHROME K3 INK

MacMall

The #1 Apple Direct Reseller!

Call MacMall and learn how to integrate your iPod and computer with your widescreen plasma or LCD TV!

MacMall Has the Best Deals on Apple Computers!

NEW iMac®
Get up to $100 cash back!*
Parallels Desktop for Mac only $9.99!*
With iMac purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$994~~
(mail-in rebate)* -$75
$919!*

NEW MacBook™
Get up to $100 cash back!*
Everki Sling Backpack only $4.99!*
With MacBook purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$1094~~
(mail-in rebate)* -$75
$1,019!*

NEW Mac® Pro
Get up to $200 cash back!*
Parallels Desktop for Mac only $9.99!*
With Mac Pro purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$2099~~
(mail-in rebate)* -$100
$1,999!*

NEW MacBook™ Pro
Get up to $150 cash back!*
Everki Sling Backpack only $4.99!*
With MacBook Pro purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$1994~~
(mail-in rebate)* -$150
$1,844!*

NEW Mac® mini
Get $20 cash back!*
Parallels Desktop for Mac only $9.99!*
With Mac mini purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$594~~
(mail-in rebate)* -$20
$574!*

iBook® G4
Get $100 cash back!*
Everki Sling Backpack only $4.99!*
With iBook G4 purchase. After mail-in rebates.
While supplies last! Call for details.
starting at ~~$799.99~~
(mail-in rebate)* -$100
$699.99!*

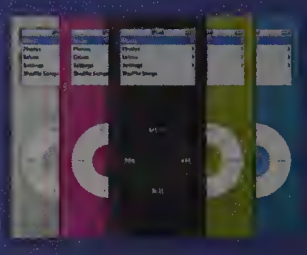
REBATE-Purchase an iMac, MacBook, Mac Pro, MacBook Pro or Mac mini and receive up to $200 cash back via MacMall mail-in rebate. Ends 2/28/07. PARALLELS DESKTOP OFFER-Get Parallels Desktop for Mac (#7080016) for only $9.99 after $10 mfr. and $80 MacMall mail-in rebates with purchase of any new Intel-based Apple CPU. Price before rebates is $79.99. Ends 2/28/07. EVERKI SLING BACKPACK OFFER-Get an Everki Carrying Case for only $4.99 after $20 mfr. mail-in rebate with purchase of any MacBook, MacBook Pro or iBook. Price before rebate is $24.99. Ends 2/28/07. FREE ENGRAVING OFFER-Get select iPod or iPod nano models engraved for FREE when you purchase it through MacMall. No rebate required. Not available for U2 Special Edition iPod. There is a $4.99 charge for iPod shuffle models and a $9.99 charge for select iPods. Call or visit www.macmall.com/myipod to place your order. FREE CARRYING CASE-Free carrying case with iPod purchase after $14.99 MacMall mail-in rebate. Price before rebate is $14.99. Offer excludes the iPod shuffle. Offer ends 2/28/07. FREE FM TRANSMITTER OFFER After $19.99 MacMall mail-in rebate. Price before rebate is $19.99. Offer ends 2/28/07. ALL OFFERS VALID WHILE SUPPLIES LAST. Download rebate coupons at www.macmall.com/rebates.

1-800-321-7532 | www.macmall.com
SOURCE CODE: MACWORLD

MacMall is the #1 source for iPods and iPod accessories!

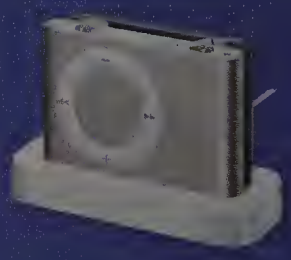
FREE FM Transmitter and Carrying Case after mail-in rebates!*
FREE Engraving!

iPod® nano
starting at
$144! (2GB)



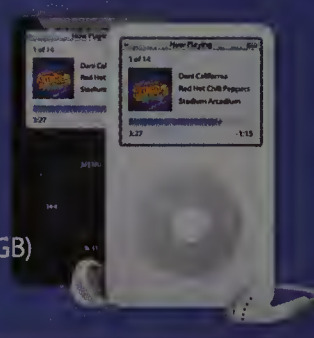
FREE FM Transmitter after mail-in rebate!*
Engraving for only $4.99!

iPod® shuffle
only
$74! (1GB)



FREE FM Transmitter and Carrying Case after mail-in rebates!*
FREE Engraving on select models!

iPod® with Video
starting at
$244! (30GB)



March 2007 www.macworld.com

Incorporating MacUser

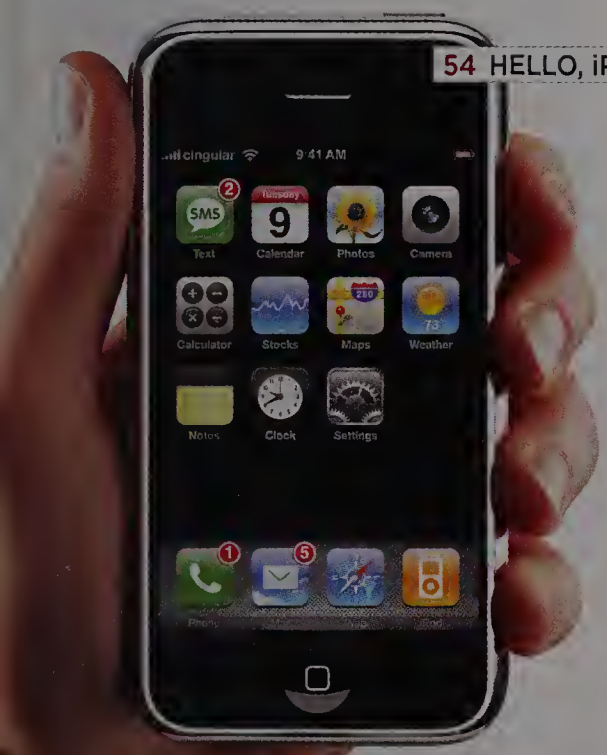
Macworld

COVER STORY

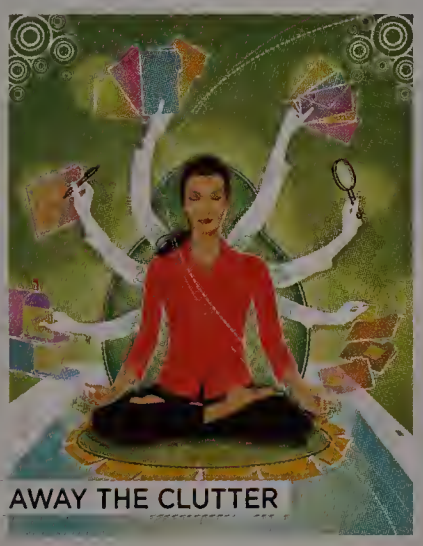
54 **Hello, iPhone**
DAN FRAKES AND JONATHAN SEFF
The iPhone is the most significant new Apple product since the iPod—it's a cell phone, an e-mailer, a Web browser, and an iPod in one incredibly sleek package. It won't be available until June—but here's what you need to know about it now.

FEATURE

62 **Clear Away the Clutter**
JOE KISSELL
Feel overwhelmed by all the files, e-mails, and random bits of data on your Mac? It's not too late to take control. Whether you crave structure or prefer to search, our simple strategies will help you tame your cluttered hard drive once and for all.



On the Cover
Illustration by Joe Zeff



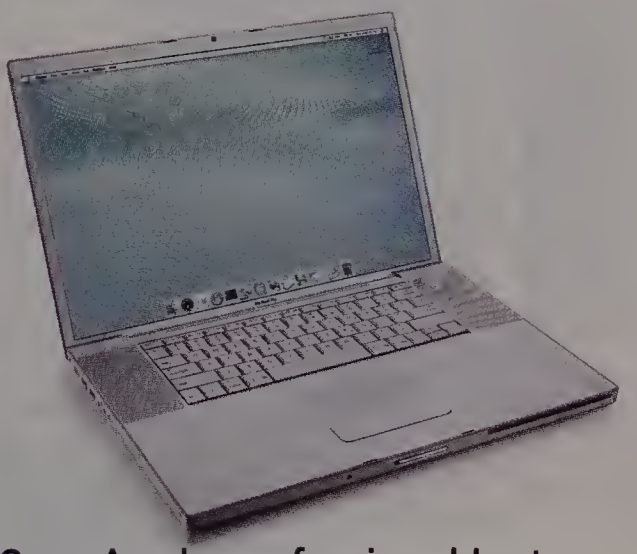
OPINION

11 **From the Editor's Desk**
JASON SNELL
The iPhone: What does it really mean for Apple—and for you?

16 **Feedback**
Readers respond.

REVIEWS

34 **Multifunction printers**
- 3½ Brother MFC-665CW
- 3 Brother MFC-9420CN
- 4 Canon Pixma MP960
- 4 Epson AcuLaser CX11NF
- 4 Epson Stylus Photo RX580
- 3 Hewlett-Packard Color LaserJet CM1017 MFP
- 4 Hewlett-Packard Photosmart C7180
- 3 Lexmark X5470



42 **Apple professional laptop**
4 17-inch MacBook Pro Core 2 Duo/ 2.33GHz

44 **More Reviews**

46 **iPod Gear**

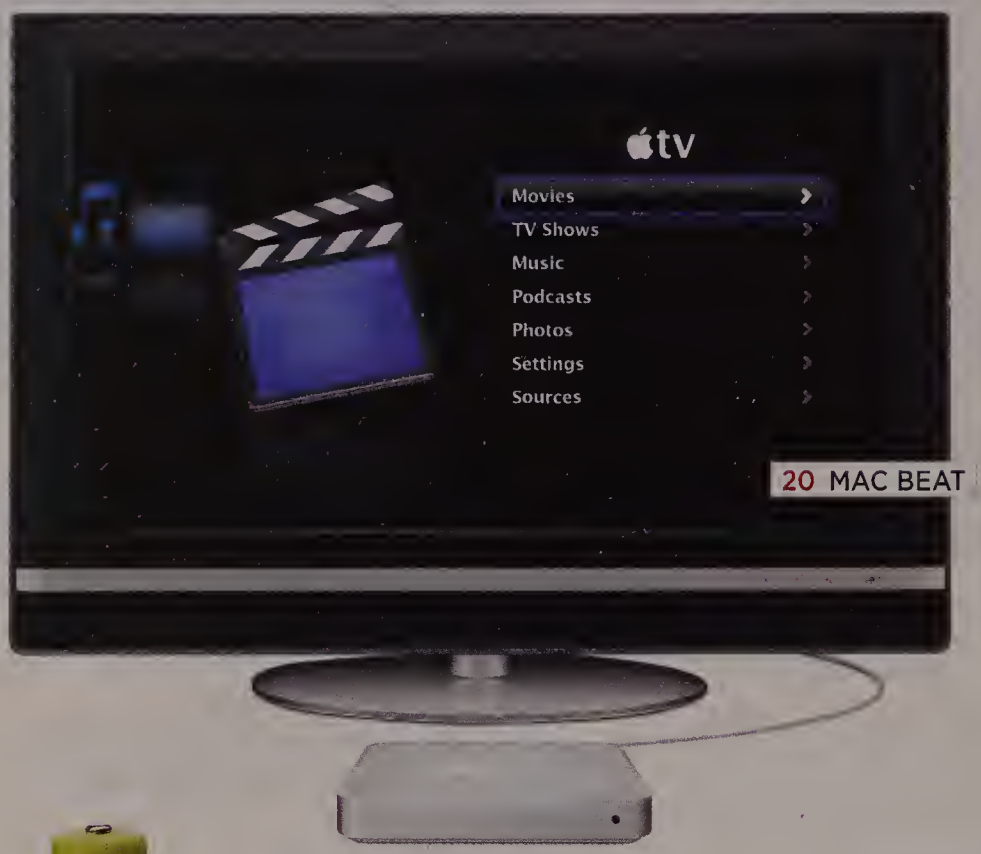
48 **Mac Gems**
DAN FRAKES
Convert all kinds of video and watch it on your iPod, put iPhoto to work for you with batch processing, and get a grip on your Mac mini's power brick by hiding it from view with a special bracket.

52 **Top Products**

Macworld March 2007

MAC BEAT

20 Apple TV and other news from Macworld Expo, Best of Show winners, Photoshop CS3 benchmarks, Microsoft Office 2008, and remembering Bruce Fraser.



The Virtual CD

> The iPhone, the Apple TV, and new movies: We take a look at the big announcements from Macworld Expo and talk to analysts about what it all means for Apple.

> In Breen's Bungalow, we highlight some of the cool gadgets you may not have heard about at Expo.

> We also have the latest Macworld Podcast, online reviews, software updates, and the Best of Macworld.com.

http://cd.macworld.com/2007/03/tricky-45

SECRETS

72 WORKING MAC
Pry Windows Files Open
CHRISTOPHER BREEN
Don't stand for an inbox full of Windows-created file attachments that you can't open. All you need are the right applications and utilities.

74 PLAYLIST
Doing the iTunes Shuffle
KIRK McELHEARN
Who needs a DJ when you've got iTunes' Party Shuffle? Use this feature to cue up music for parties—or for your workday.

76 DIGITAL PHOTO
Stop Seeing Red
LEE VARIS
Sometimes our photos need to be cleaned up or enhanced. Learn how to use Adobe Photoshop to fix uneven skin tones.

78 CREATE
Get Your Web Site Noticed
DAVID SAWYER McFARLAND
It's not always easy to get your Web sites, blogs, and podcasts noticed. Here's how to design your site to attract the attention of search engines and readers.

80 MOBILE MAC
Reclaim Hard-Drive Space
JOE KISSELL
With OS X, applications, music, photos, and videos, your laptop can run out of hard-drive space fast. But using our tips, you can make some room.

82 GEEK FACTOR
Resize Partitions On-the-Fly
KIRK McELHEARN
Learn about a hidden command that you can use to resize disk partitions, *without* losing data or using add-on software.

84 HELP DESK
Mac OS X Hints
ROB GRIFFITHS
Learn how to compare shots in iPhoto, automatically add Spotlight comments so you can find your files fast, easily install and uninstall apps, and more.

88 **Mac 911**
CHRISTOPHER BREEN
Sync Address Book without .Mac, find missing iPhoto pictures, fix fonts in TextEdit, add an Ethernet switch to an AirPort Base Station, and more.

BACK PAGE

120 **Hot Stuff**
Check out our favorite new stuff.

THE DESIGNERS : #8

TRIPLE INTERFACE + eSATA = QUADRA.

Quadruple Interface | 500GB*

LACIE d2 QUADRA HARD DRIVE: DESIGN BY NEIL POULTON

Fully loaded with all the best interfaces – eSATA, FireWire 800, FireWire 400 and USB 2.0 – the new d2 Quadra delivers a fast burst transfer rate of up to 80-90MB/s, a 16MB cache, and 3-level power management. Easily store and exchange files, videos, music and photos. Designed by Neil Poulton, the d2 can stand upright, stack or be rack-mounted and it stays quiet and cool. The new LaCie Shortcut Button allows you to launch any application with one simple push, such as the included software EMC® Retrospect® Express. **www.lacie.com**

LACIE

High design. High performance.

© 2007, LaCie. The LaCie logo is a trademark of LaCie. All rights reserved. *Total accessible capacity varies depending upon operating environment (typically 5–10% less).

THE EDGE IS NEVER DULL.

ALL-NEW EDGE Introducing the crossover that makes any path worth pursuing. Twists and turns? Bring 'em on. Edge offers the confidence of available all-wheel drive and agile, sports sedan-like handling. And because you never know what's up the road, every Edge has AdvanceTrac® with Roll Stability Control (RSC®). So, stay sharp with the Edge, starting at $25,995 MSRP.* And put dull in the rearview mirror.

*SE $25,995; as shown, SEL $30,135. Taxes, title and license fees extra.

Ford

BOLDMOVES

fordvehicles.com/edge

NEC Display Solutions is the #1 worldwide stand-alone monitor manufacturer in the specialty market for CY2005, according to Suppli's Specialty Monitor Market Tracker report.
NEC Display Solutions of America, Inc. © 2007 NEC Display Solutions of America, Inc. All rights reserved. Simulated images in monitors.

NEC

NEC Display Solutions

What could you see with NEC?

White-knuckle intensity in every frame. That's how real it can be with NEC Display Solutions. If you can imagine it, NEC can make it happen. With our unrivaled selection of professional LCD monitors, such as the NEC MultiSync® 90 Series, you can create a work environment that is more immersive, more dynamic than ever. Whether you're creating, editing or retouching the perfect shot, our top-ranked* display solutions can make you feel like you're in the middle of the action. See what's possible now at necdisplay.com/pro.

Apple Isn't Waiting

Steve Jobs's keynote address at this year's Macworld Expo was unlike previous keynotes in so many ways, from his revelation that Apple was removing *Computer* from its name to the complete absence of new Mac announcements. And the one product he did announce (see "Hello, iPhone," page 54) was unlike anything Apple's done before.

Clearly, everyone at the company—from Jobs on down—thinks that the iPhone is going to be a transformative product, one that doesn't just thrust Apple into a new and highly competitive market, but also makes it a serious player, if not a leader, in that market overnight. Still, there's a connection between the iPhone and all the other Apple products that have come before it.

Changing the World

At its core, Apple has always been about using technology to change the lives of everyday people. Starting with the iPod and continuing with the iPhone, Apple has proven that it's really much more than just a computer company. It's a technology company whose goal is to make great devices that people will use in all parts of their lives.

The iPhone isn't the only example of this that came to light at this year's Expo. The reannouncement of Apple TV (formerly iTV) fits the we're-more-than-a-computer-company theme, too. (For more details on Apple TV, see "Inside Apple TV" in this month's *Mac Beat*.) Apple is pushing its technology, as well as its relentless integration of hardware and software, into all sorts of new places. Yes, some fans of Apple's computers may be concerned about the company's new name—but they really shouldn't be. This isn't some new Apple they'll need to get to know. Rather, this is the company that made the Mac great, applying the same product philosophies to a slew of new areas. Just as the personal-computer market needed a Mac in 1984, the complex and fractured world of cell phones could really use an iPhone.

Will Apple become the dominant cell phone maker in the world? I doubt it. But I think it'll be a credible competitor, and I think its presence in the market will force everyone else who develops cell phones to take a fresh look at their design assumptions and realize that some of their phones' features simply aren't good enough for consumers.

Plenty of Questions

Perhaps the most shocking thing about this year's Expo keynote was the depth of the iPhone announcement. Steve Jobs was on stage for about two hours, and he devoted almost all of that time—barring a brief Mac update and a short Apple TV update—to the iPhone. This was perhaps the most exhaustively detailed Apple product rollout I can remember.

Yet for every piece of information we got about the iPhone that day, I found myself adding half a dozen questions to the list I was keeping in my head for my follow-up briefing with Apple. According to Apple, the iPhone runs Mac OS X. Will Mac developers be able to develop programs that will run on the iPhone? What about the iPhone's "widgets": are they Dashboard widgets or something else? Why does the iPhone's SMS text-messaging program look like iChat, when it won't let you connect to the real AIM chat network that your desktop iChat client uses?

The list went on. We asked Apple as many of those questions as we could; you'll find many of the answers starting on page 54. But the length of that list clearly demonstrates that the iPhone is a much more complex product than the iPod. The iPhone is, indeed, more akin to the Mac than to the iPod. We'd probably call it a handheld computer if we weren't calling it a phone instead.

Whither iPod?

The comparison between the iPod and the iPhone raises still more questions. An iPod with a wide screen like the iPhone's would be great for watching videos. Yet this new wide-screen iPhone has only as much storage as the iPod nano. Is there a higher-capacity iPod waiting in the wings—one that looks a lot like an iPhone, with more storage space but no phone features? Clearly, there's much for us to learn about how the iPod and iPhone product lines will coexist; I suspect it'll take months before we start to get answers.

But I'm not waiting around in the meantime. I've already ordered my Apple TV, and I fully expect that I'll be moving on to an iPhone in the very near future. As the singer and songwriter John Mayer pointed out as the keynote event ended, five months sure is a long time to wait for a new Apple gadget. At least I'll have an Apple TV to keep me company in the meantime. □

What do you think of the iPhone? Of Apple TV? Come over to macworld.com/forums and let me know.

PORTRAIT BY PETER BELANGER

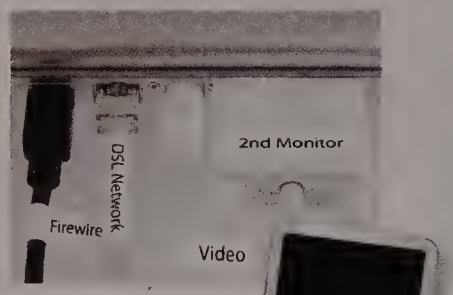
We improved perfection.

When you need to simplify, identify, track or organize, the Smart Label Printer® from Seiko Instruments is ideal.

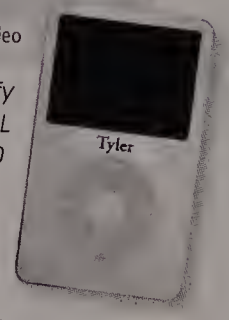
Easily create custom labels with 1-D and 2-D bar coding, such as Codabar, UPC, EAN, Code 128, MaxiCode, PDF417 or Data Matrix using our bundled Smart Label software. Simply plug the SLP into your Mac® and print labels quickly, as fast as one label per second, in clear, legible, machine-scannable 300 dpi. The SLP is hassle free with no ink, noise, or fuss thanks to our clean and quiet direct thermal printing.

Choose from three great SLP models and our expanding line of SmartLabels®. See all the Smart Label Printer products at **www.siibusinessproducts.com** or our authorized resellers.

Buy.com • CDW • CompUSA
Fry's Electronics • Micro Center



Mark or identify with SLP-35L or SLP-27210



Label packages with SLP-SRL or SLP-SRLC

SII

Seiko Instruments USA Inc.

© 2007 Seiko Instruments USA Inc. All rights reserved. "Smart Label Printer" is a registered trademark and "SmartLabels" is a trademark of Seiko Instruments USA Inc. "SII" and "SII" logo are registered trademarks of Seiko Instruments USA Inc. All other brands and trademarks are the property of their respective companies.

Macworld

VP, Editorial Director	Jason Snell
Executive Editor, Print	Dan Miller
Executive Editor, Online	Philip Michaels
Managing Editor, Print	Sue Voelkel
Managing Editor, Online	Curt Poff
Art Director	Rob Schultz
Macworld.com News Director	Jim Dalrymple
Senior Editor, Features	Kelly Turner
Senior Editor, How-to	Scholle Sawyer McFarland
Senior Editor, News	Jonathan Seff
Senior Editor, Reviews	Jackie Dove
Lab Director	James Galbraith
Senior Editors	Christopher Breen, Peter Cohen, Dan Frakes, Rob Griffiths
Associate Editor, Reviews	Eric Suesz
Assistant Editor	8rian Chen
Copy Editor	Cassandra Earls
Designer	Carli Morgenstein
Editor at Large	Rick LePage
Senior Contributors	Adam C. Engst, Jim Heid, Ted Landau
Contributing Editor	Cathy Lu
Contributing Lab Analyst	Jerry Jung
Contributing Copy Editors	Gail Nelson-Bonebrake, Charles Purdy
Production Consultant	Jennifer Werner
Contributing Photographer	Peter 8elanger

Absent Friends: John J. Anderson, Andrew Fluegelman, 8ruce Fraser, Cary Lu, Charles Seiter, Derek Van Alstyne

HOW TO CONTACT MACWORLD SUBSCRIPTION SERVICES

Access your subscription account online—24 hours a day, 7 days a week—at www.macworld.com/customer_service or http://service.macworld.com. You can use online subscription services to view your account status, change your address, pay your bill, renew your subscription, report a missing or damaged issue, get the answers to frequently asked questions, and much more.

To start subscribing, visit http://subscribe.macworld.com.

U.S. Mail	*Macworld* Subscriptions Department P.O. 8ox 37781, 8oone, IA 50037-0781 (If you are writing about an existing account, please include your name and address as they appear on your mailing label.)
E-mail	subhelp@macworld.com (Send your full name and the address at which you subscribe; do not send attachments.)
Fax	515/432-6994
Phone	800/288-6848 from the United States and Canada; 515/243-3273 from all other locations

The one-year (12-issue) subscription rate is $34.97; the two-year rate, $59.97; and the three-year rate, $79.97. Foreign orders must be prepaid in U.S. funds; add $10 per year for postage to Canada or $25 per year for air freight to all other countries. Checks must be made payable in U.S. currency to *Macworld*. Please allow 3 to 6 weeks to receive your first issue or for changes to be made to an existing subscription.

MACWORLD EDITORIAL

The editors of *Macworld* welcome your tips, compliments, or complaints. Some stories and reviews from past issues can be located at www.macworld.com. We are unfortunately unable to look up stories from past issues; recommend products; or diagnose your Mac problems by phone, e-mail, or fax. You can contact Apple toll-free, at 800/538-9696, or visit the company's Web site, at www.apple.com. **For editorial and advertising contact information, please turn the page.**

March 2007, Volume 24, Issue 3

Macworld is a publication of Mac Publishing, L.L.C., and International Data Group, Inc. *Macworld* is an independent journal not affiliated with Apple Computer, Inc. Copyright © 2007, Mac Publishing, L.L.C. All rights reserved. *Macworld*, the *Macworld* logo, *Macworld Lab*, the mouse-ratings logo, *MacCentral.com*, *PriceGrabber*, and *Mac Developer Journal* are registered trademarks of International Data Group, Inc., and used under license by Mac Publishing, L.L.C. *Apple*, the Apple logo, *Mac*, and *Macintosh* are registered trademarks of Apple Computer, Inc. Printed in the United States of America.

IDG
INTERNATIONAL DATA GROUP

Go The Distance With *NuPower*®
High Capacity Batteries

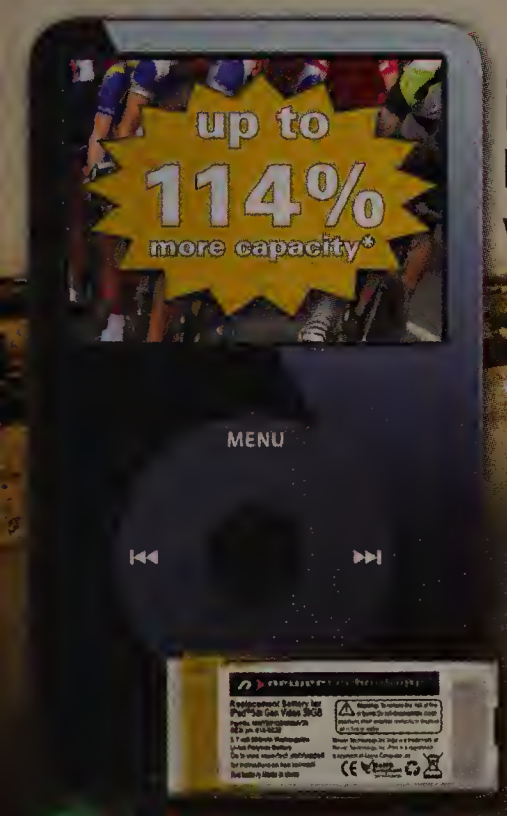
PowerBook® & iBook® Batteries
Built to outrun and outlive any other battery

"...completely delighted with the performance."
- MacOpinion.com

- Balanced top tier power cells for unmatched quality and performance
- Thermal fuse technology protects you and your laptop
- Free battery recycling return label
- RoHS compliant**
- Made in the USA

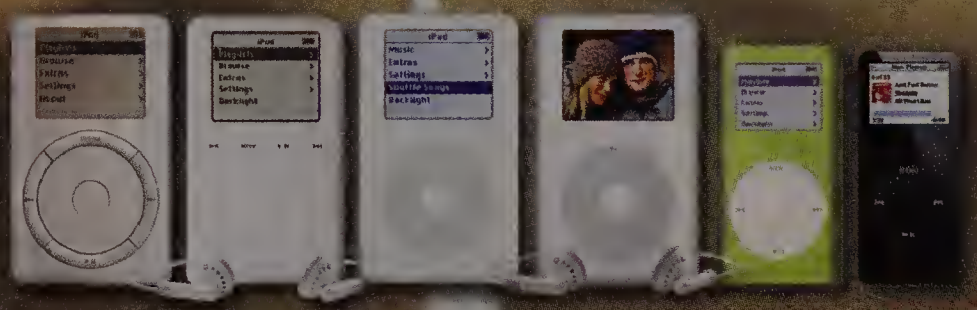
Mercury-Free
RoHS Compliant

Starting from $99.95



iPod® Batteries
Listen, watch, and play longer with HOURS added to your runtime!

Starting from $19.99



"Probably the best value upgrade for the iPod we've ever seen!"
MacUser

HIGHLY RECOMMENDED iLounge.com | All Things iPod

RoHS Compliant

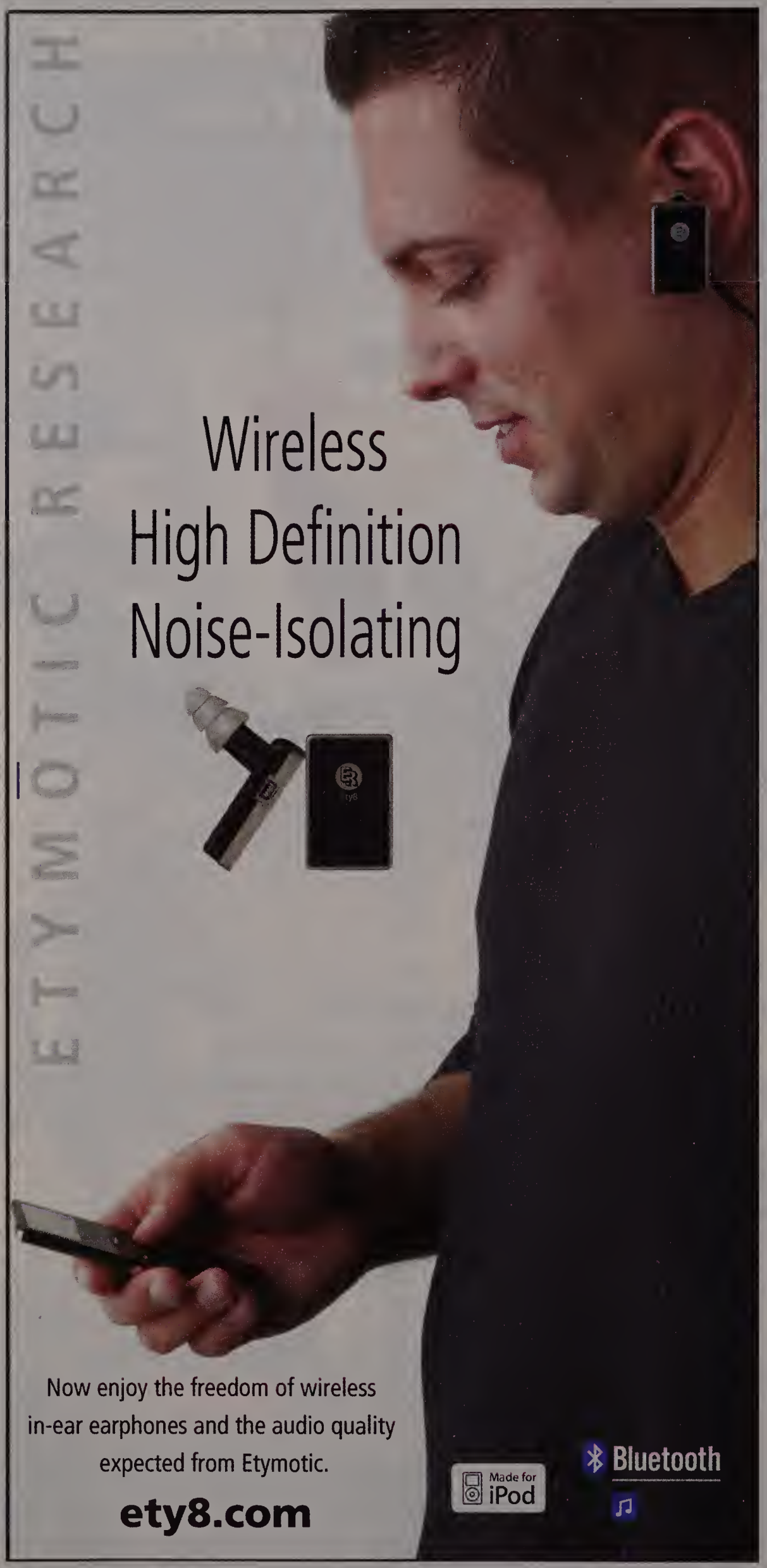
Whatever iPod model you have, *NuPower* lets you run longer between recharges!

newertechnology inc.
http://www.newertech.com

iPod, PowerBook and iBook are trademarks of Apple Computer, Inc. No affiliation is implied or suggested.
and NuPower are registered trademarks and the Newer Technology, Inc. logo is a trademark of Newer Technology, Inc.

To purchase NewerTech products, visit distributor:
Other World Computing
at *www.macsales.com* or (800)275-4576

*Over Apple original battery **Certain models



Macworld

President, CEO	Jeff Edman	
VP/Publisher, Macworld.com	Michael Carroll	(508/370-0842)
Associate Publisher, Macworld/ Magazine Sales, East Coast	Paul Zampitella	(781/944-0528)
Magazine Sales Manager, West Coast	Leslie Piper	(415/243-3509)
Online Sales Manager, East	Paul Bonarrigo	(508/370-0844)
Online Sales Manager, West	Jason Thach	(760/736-9228)
Account Manager, Showcase	Niki Stranz	(415/243-3664)
Ad Operations Specialist	Kenji Kawakami	(415/243-3628)
Ad Operations Coordinator	Jessica Hemerly	(415/243-3575)
Senior Director, Marketing	Sandy Wong	(415/978-3181)
Marketing Manager	Heidi Tanaka	(415/978-3168)
Marketing Specialist	Michelle Kloss	(415/978-3380)
Executive Asst. to the President	Roxanne Warrick	(415/978-3298)
Production Director	Steve Spingola	
Prepress Manager	Tamara Gargus	
Booking and Billing Manager	Ricardo Sandoval	
CTO	Aaron Jones	
Development Director	Bill Cappel	
General Manager, Online	Ulla McGee	
Director, Business and Legal Affairs	Sue Krenek	
Director, Online Marketing	Alexa Wriggins	
Senior Manager, Business Development	Brian Buizer	
Online Marketing Specialist	Ben Veechai	
Member Service Specialist	Brian Witchel	
Online Community Manager	Kellie Parker	
VP, Human Resources	Kate Coldwell	
Human Resources Representative	Jenny Steele	
Director, Consumer Marketing	David Cobb	
Newsstand Director	Holly Drawbaugh	
Director, Retention Marketing	Lisa Radler	
Senior Manager, Retention Marketing	Robyn Patty	
Retention Marketing Coordinator	Shavon Burden	
Senior Subscription Marketing Manager	Linda Trinh	
Subscription Marketing Manager	Jennifer Ma	
CFO	Vicki Peilen	
Director, Finance	Diane Ryczek-Rae	
Director, Accounting	Michelle Reyes	
Staff Accountant	Lee Ann Baldwin	
Accounting Coordinator	Andrew Lyon-Hall	

HOW TO CONTACT MACWORLD STAFF

Our offices are located at 501 Second Street, 5th Floor, San Francisco, CA 94107; phone, 415/243-0505; fax, 415/243-3545. *Macworld* staff can be reached by e-mail at *firstname_lastname*@macworld.com.

LETTERS TO THE EDITOR

Send comments about any aspect of *Macworld* to letters@macworld.com. Due to the high volume of mail we receive, we can't respond to each letter. We reserve the right to edit all submissions. Letters published in *Macworld* or on Macworld.com become the property of Mac Publishing.

BACK ISSUES OF MACWORLD

Starting with the March 2003 *Macworld*, back issues can be downloaded in digital format, from www.zinio.com ($6.99; Mac OS X 10.1 or later required). Print-format back issues (subject to availability) cost $8 per issue for U.S. delivery, $12 for international delivery; prepayment in U.S. currency to *Macworld* is required. Send a check or money order to *Macworld* Back Issues, P.O. Box 37781, Boone, IA 50037-0781; or phone 800/288-6848 (U.S. and Canada) or 515/243-3273 (all other locations).

REPRINTS AND PERMISSIONS

You must have permission before reproducing any material from *Macworld*. Write to *Macworld*, Reprints and Permissions, 501 Second Street, 5th Floor, San Francisco, CA 94107; include a phone number. To order reprints of your company's editorial coverage, call Reprint Management Services at 717/399-1900; fax 717/399-8900; or e-mail macworld@reprintbuyer.com.

MAILING LISTS

We periodically make lists of our customers available to mailers of goods and services that may interest you. If you do not wish to receive such mailings, please write to us at *Macworld*, P.O. Box 37781, Boone, IA 50037-0781, or e-mail us at subhelp@macworld.com. Please include a copy of your mailing label or your full name and address.

MACWORLD CONFERENCE & EXPO

As the flagship sponsor of Macworld Conference & Expo, *Macworld* encourages all subscribers to attend this exciting annual industry event. For information, please visit www.macworldexpo.com.

BPA

Eliminate paper. Liberate your cool.

Mac

Adobe Acrobat

SCAN

Fujitsu ScanSnap™. It's a snap. Why push paper when you can push a button? Free yourself with the new ScanSnap S500M scanner, the most powerful solution in its class for turning paper into electronic documents. Since the Fujitsu ScanSnap comes preloaded with Adobe® Acrobat® 7.0 Standard (a $299 value), one touch of a button is all it takes to turn double-sided documents into searchable PDFs, ideal for storing, protecting and sharing documents. And you'll be doing it fast. Native support for the new Intel® chipset delivers a blazing 18 pages per minute scan speed. All this and it's small enough to fit where your inbox used to be. So get rid of paper and get back your cool with the Fujitsu ScanSnap. It's a snap! Visit us at **http://us.fujitsu.com/scanners/96C5** for more information and a chance to win an iTunes® gift card.

Free I.R.I.S. card scanning and OCR software*

NEW ScanSnap S500M
$495 MSRP

ScanSnap fi-5110EOXM
$395 MSRP

FUJITSU

THE POSSIBILITIES ARE INFINITE

CDW Insight MacMall

© 2007 Fujitsu Computer Products of America, Inc. All rights reserved. Fujitsu and the Fujitsu logo are registered trademarks of Fujitsu Ltd. iTunes is a trademark of Apple Computer, Inc., registered in the U.S. and other countries. Adobe and Acrobat are registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. Cardiris, Readiris and the I.R.I.S. logo are I.R.I.S. trademarks. All other trademarks are the property of their respective owners. * I.R.I.S. software promotion is available through downloadable mail-in rebate form and is retroactive to October 1, 2006 for both the S500M and fi-5110EOXM models.

FEEDBACK

The Intel Deluge (Continued)

When Steve Jobs said that Apple would convert its entire line of computers to Intel chips by the end of 2006, he wasn't kidding. The past year has seen a flood of new Intel-based systems. These unremitting waves of new machines have overwhelmed some Mac stalwarts accustomed to waiting years between generations of PowerPCs. Our advice: Don't sweat it. So what if the Mac you bought a month ago is no longer the latest and greatest? As long as it runs your software, it's still a positive move.

Future Shock

ZA GENTLE

The Mac Pro is indeed a fast, exhilarating machine ("Inside the Mac Pro," November 2006)—to me, by far the best Mac ever. But for those of us who use third-party plug-ins for Apple's Logic Pro or Pro Tools or for other professional applications, the Mac Pro presents a problem: Those plug-ins don't yet run on Intel-based Macs. The plug-in vendors say they are working fast to come up with Universal versions for the new Macs, but most are behind schedule; several companies have failed to deliver announced updates. Please let your readers know that the speedy new Macs won't get much done if Universal versions of their favorite plug-ins aren't available.

AARON WOLSKE

About your ongoing coverage of Intel Macs: We went six years with only three generations of PowerPC chips (not counting clock-speed increases). Now, barely a year into the Intel transition, we've already seen three new chips (the Core Solo, the Core Duo, and the Core 2 Duo). The former stability of the Mac platform ensured that our software would remain usable for extended periods of time. Has that era of stability ended?

JAKE PURCHES

One of the reasons I *liked* PowerPCs was that Macs didn't change all the time. Now, two weeks after you shell out your money for the latest machine, you find that it's been superseded by something newer. It's depressing. I deliberately bought the last, most powerful Power Mac, the G5 Quad, because I run a lot of apps that are built for the PowerPC or even for OS 9. I can't do what I need to do on an Intel Mac. This quick progress isn't necessarily a good thing for Mac users, even though it may be great for retailers.

Take Them with You

IAN WELLS

I have a suggestion for a follow-up to your article about portable applications ("Your Apps in Your Pocket," *Mobile Mac*, November 2006): I run two Macs at work and two at home (a desktop and a portable at each location). I try to keep the same versions of Mac OS X and my applications on all of them. To do this, I currently synchronize my Home folders and sections of my Library folders between each desktop-portable pair of Macs. Now I'm trying to figure out how to take that one step further, by keeping working copies of the supporting files for Safari, Address Book, and Mail on a USB drive, accessible from *any* of my systems to which it is attached.

We may have a solution for you. Check out macworld.com/2410 *for a way to take that next step.—Dan Miller*

By the Books

ROBERT SUMMERS

I enjoyed your article "Beyond Apple's Photo Books" (*Digital Photo*, December 2006). But please note that you cannot upload a Pages-created PDF file to Lulu; it will be automatically rejected. This has been a problem for a long time, and there's no resolution in sight. You can find the details on the Pages forum at www.apple.com and the discussion forum at www.lulu.com. I've published two books on Lulu. I wrote both using Pages, and then used Pages' Export To Word feature to create a *.doc* file. After touching up those files in Word to get the same look I had in Pages, I created PDFs from Word and uploaded those to Lulu, which accepted them without a problem.

TONY TRIOLO

In your December 2006 *Digital Photo* column, you explained how to create a photo book without iPhoto and Aperture. You cited two online services in particular—Blurb and Lulu—but failed to mention the latest offerings from Shutterfly (www.shutterfly.com) and AsukaBook (asukabook.com). Shutterfly's recent improvements make it the easiest, most intuitive, and most flexible service out there. For people who will accept only the best, AsukaBook is hard to beat. Its books are on a par with the slickest coffee-table books, complete with dust jackets, presentation boxes, and spine printing. One caveat, however: You have to be a professional photographer to use AsukaBook.

I Spot the Serif

LEE GRAVES

About the letter from Michael Myers (*Feedback*, December 2006): I, too, miss the WYSIWYG fonts we had in OS 9. I

continues

CORRECTIONS

We ran the wrong picture next to our description of Timbuk2's Artist's Canvas Bag in "*Macworld*'s Gear Guide" (December 2006). That picture was of Timbuk2's Single Speed Laptop Courier.

In "Troubleshooting MacBooks" (*Mobile Mac*, January 2007), we implied that you could reduce processor speed on the MacBook and MacBook Pro by using the Energy Saver preference pane. While that option was available on the PowerBook, it isn't on the MacBook and MacBook Pro.

PHOTOGRAPH BY PETER BELANGER

Have fun with your digital photos

WACOM

Graphire4 gives you the control you need to quickly and easily edit your digital photos. Draw, paint, and create artwork for slide shows, scrapbooks or craft and hobby projects.

Enhance Your Photos

Dress up your memories by correcting color and lighting and removing image imperfections and flaws using your pen with Adobe® Photoshop® Elements 3 (software included).

Apply Color and Light Enhancements

Intensify early-morning light, soften skin tones, or brighten dim areas of your photo using creative color effects and filters applied by your pen in Nik® Color Efex Pro 2 GE (software included).

Draw and Paint

Try any one of over 50 pressure-sensitive brushes and a mix of papers, nozzles, and patterns to create artwork from your digital photos using your pen and Corel® Painter™ Essentials 2 (software included). When used with a Wacom pen, Painter Essentials 2 looks and feels like just about any natural art tool your heart desires.

Pressure Sensitivity

Control your software tools like exposure, brush size, opacity and more by simply changing how hard you press the pen tip to the tablet.

Visit www.TabletPhotoFun.com | **Call** 1.800.922.2589

graphire4

©2007 Wacom Technology Corporation. Wacom, Graphire, Intuos, and Cintiq are trademarks of Wacom Company Ltd. All rights reserved.
All other trademarks are property of their respective owners. All prices listed are the Wacom U.S. standard list price.

From $99

haven't the time to open Tiger's font window to see what each font will look like. Please, Apple, just list type in WYSIWYG style.

JEFF MAO

I want to respond to Michael Myers's wish for a WYSIWYG font menu in OS X. Many people may not realize that in applications that use the Font palette (⌘-T), you can expand that palette to display the actual font. Above the Style pull-down palette is a dot. Drag that dot down to open the font-display area. Select a font, and you can see how it looks. This isn't the same as a WYSIWYG font menu, but I actually like it better, because it allows you to create your own collections of type styles visible in all applications that use the Font palette.

Getting in Gear

JOHN DOYLE

In "*Macworld*'s Gear Guide" (December 2006), you mentioned the JBL Go + Play and provided a link to the JBL Web site. But when I went to that site, I couldn't find that product. Is there somewhere else I should try?

The Go + Play was originally scheduled to be available by the time that story was published. But according to JBL, the product has been delayed. We're sorry for the confusion.—Dan Frakes

BILL GALLAGHER

In response to your December 2006 story, "Take Your LPs for a Spin," you don't really need a "battery of equipment" to digitize your records. If you already have a turntable, the stereo equipment, and a computer, all you need is the Griffin iMic, which costs less than $40. The iMic plugs into your stereo with audio jacks and into your computer using the USB port. You import each song with GarageBand, then export to iTunes. No problem!

Which Library?

ALESSANDRO PEDICELLI

Regarding your tip "Use Screen-Saver Images as Desktop Pictures" (*Mac OS X Hints*, December 2006): I thought this tip sounded really cool and tried it myself, but I encountered a problem. The first step is to find the screen-saver files. You said to go to the /System/Library/Screen Savers folder. When I opened that folder, it was empty. I tried this process on both my Intel iMac and my G4 tower, and both times encountered the same problem. Was I doing something wrong?

More than likely, you were looking in the Library folder in your Home directory or in the /Library folder, but not in the /System/Library folder. I guarantee that that folder isn't empty.—Rob Griffiths

Post comments on our forums (www.macworld.com); send them by mail to Letters, *Macworld*, 501 Second Street, 5th Floor, San Francisco, CA 94107; or send them by e-mail to letters@macworld.com. Include a return address and daytime phone number. Due to the high volume of mail we receive, we can't respond personally to each letter. We reserve the right to edit all letters and posts. All published letters and forum comments become the property of *Macworld*.

iKaraoke

Karaoke for Your iPod

iTalk Pro

CD-Quality Stereo
Microphone for iPod

iTrip auto

FM Transmitter and Car Charger for iPod

GRIFFIN

iPod Accessories
iPod Cases
Mac/PC Accessories
PSP Accessories

buy now at www.griffintechnology.com

ILOUNGE
ACCESSORY MAKER - iPOD

Inside Apple TV

What We Know and What's New Since Last Year's Announcement

BY JASON SNELL

Apple's Macworld Expo announcement of its new set-top box, the Apple TV, wasn't really unexpected; after all, the company had already previewed it in September 2006, when it carried the code name of iTV. But almost four months after we got our first glimpse, and just weeks before the product hits store shelves, we've learned a bit more about the device that Apple designed as the bridge between your Mac's library of digital content and the TV in your living room.

What We Knew

First, a recap: The $299 Apple TV is a small device (7.7 inches square and 1.1 inches high) that's destined for your living room. It's meant to attach to a wide-screen digital TV (and to get digital audio output, you can hook it up to a home theater sound system). With an Apple TV hooked up and your TV turned on, you'll see a menu of options similar to those you'd find on an iPod or in Apple's Front Row software for the Mac.

To make content available to your TV, the Apple TV connects to your home network, most commonly via 802.11 wireless networking. (Yes, it has an Ethernet port on the back for those of you who have a wired network.) Once that's done, it can act as a bridge between your computer—with its movies, TV shows, music, and photos—and your TV.

You control the Apple TV with an Apple Remote. The Apple TV software has an iPod-style interface—but instead of seeing the interface on a small iPod screen, you get a larger-than-life view of it on your TV screen. The Apple TV software also lets you access movie trailers and 30-second previews of popular iTunes songs.

And just as Apple said back in September, you'll need a wide-screen TV with digital or component inputs in order to use the Apple TV. It doesn't have to be an HDTV set, but it does need to have at least an enhanced-definition (EDTV) display that's capable of displaying at 480p, or 480 lines of progressive-scan resolution.

What We Learned

Beyond its new name, the biggest piece of new information about the Apple TV is that there's a 40GB hard drive inside. Last year, we speculated that the Apple TV might have only a small amount of storage space and would be forced to stream all audio and video data over a network connection; the hard drive changes things considerably.

You load data onto the Apple TV's hard drive by synchronizing it with a computer (a Mac or a PC) running iTunes. The Apple TV on your local network will appear in your iTunes Source list, and you'll be able to configure synchronization features, just as you can with an iPod. iTunes then automatically copies movies, TV shows, music, photos, and other data across your home network and onto the Apple TV. (Apple estimates that the hard drive is big enough to hold about 50 hours of movies and TV shows, 9,000 songs, or 25,000 pictures.)

If you have more than one computer in your house, don't worry—while the Apple TV will sync with only one copy of iTunes, it can connect to as many as five other computers and stream content (including movies, TV shows, and music) from them. The only difference is that it won't store the content from those computers on its hard drive. (And the Apple TV can't connect to iTunes libraries without explicit permission—as it tries to connect, it displays a PIN code on the computer's screen; you have to type that code into iTunes to connect.)

Apple also gave us more details about the video formats the little box will play. They are similar to the video that the iPod plays: H.264 and MPEG-4 videos up to 640 by 480 pixels (the very dimensions of videos available at the iTunes Store). But it'll also play high definition content at 1,280 by 720 pixels, or 720p in HDTV terminology, on both 720p and 1,080i HDTVs.

Other tidbits we've learned include the fact that Apple TV is powered by an unspecified Intel processor; includes a 100BaseT Ethernet port (not Gigabit); and supports 802.11 wireless networking, including the ultrafast draft 802.11n specification (see "Apple Releases New AirPort Extreme Base Station").

What We Don't Know

Although the Apple TV is coming into focus, we still have a lot of questions. Perhaps the biggest one is this: At a time when Internet video services such as YouTube have become massively popular, would Apple really release an Internet-connected TV product that doesn't have the ability to browse such services? Apple has never demonstrated such a capability, but it has shown off the Apple TV's ability to browse and view movie trailers streamed from Apple.com; presumably, browsing a site such as YouTube would work similarly.

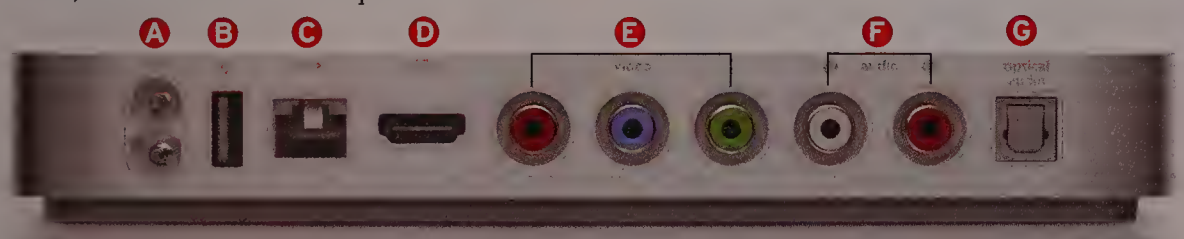
Then there are questions about file formats. The Net is littered with video—in formats such as DivX, Xvid, WMA, MPEG-2, and live video streams in Windows Media and Real—that doesn't appear in tidy MPEG-4 bundles. If Apple TV doesn't support many (or any) of these formats, it will be unable to play a huge chunk of the video content available on the Net. Wouldn't it be great if the Apple TV were able to play back Major League Baseball's live MLB.TV streams (which are currently available only in Windows Media and Real formats), CNN's Pipeline (Windows Media), or Apple board member Al Gore's Current TV (Flash video)?

This isn't to say that intrepid programmers won't find ways to make video Apple TV–friendly—but even the most elegant workaround is still not as good as the built-in, "it just works" simplicity we've come to expect from Apple.

The good news is that even if the Apple TV doesn't have the ability to play such videos right now, it may be able to someday. Under Apple TV's Extras menu is a prominent Update Software command—suggesting quite clearly that the Apple TV is a young dog that can be taught numerous new tricks.

There's one final mystery: Apple hasn't said what the Apple TV's USB connector is for. Maybe it'll let you add external storage via a USB hard drive, directly connect your iPod, or maybe even add on a high definition DVD player. For now, all we can do is guess. □

JASON SNELL is *Macworld*'s editorial director.



Modern Times The back of the Apple TV has connections for power A, USB 2.0 B, 100BaseT Ethernet C, HDMI video and audio D, component video E, analog audio F, and optical digital audio G.

APPLE TV PHOTOGRAPHY BY PETER BELANGER; AIRPORT PHOTOGRAPH COURTESY OF APPLE

Apple Releases New AirPort Extreme Base Station

While Steve Jobs was showing off the iPhone and the Apple TV, Apple quietly introduced a new AirPort Extreme Base Station that supports 802.11n, a networking standard that works up to five times faster and at up to twice the range of the previous version. The new base station will be available around the same time as the Apple TV, for $179.

The new AirPort Extreme Base Station marks a radical design departure from its predecessors. While the older Base Stations had a squat, teardrop-shaped design, the new model features a beveled square shape similar to that of the Mac mini and the new Apple TV. It measures 6.5 inches square and 1.3 inches tall.

Based on a draft specification of the 802.11n standard, the new AirPort Extreme Base Station is backward-compatible with the earlier 802.11g standard and works with 802.11b- and 802.11a-based devices. 802.11n uses a technique known as multiple-input, multiple-output (MIMO) to achieve faster performance and a longer range. While 802.11n offers seamless connectivity with older products, the performance of an 802.11n network will slow down if you connect slower devices to it. Newer Macs—specifically Core 2 Duo iMacs (excluding the 17-inch 1.83GHz model), Core 2 Duo MacBooks and MacBook Pros, and Mac Pros—include compatible hardware, but it must be enabled through software that's included with the new Base Station.

The Base Station also lets you share USB-based printers and hard disk drives with the network, and it can support a hub, so you can attach multiple devices. Software included with the device lets you create password-protected accounts or limit access to certain files and folders. The device itself can support as many as 50 users at once.—PETER COHEN

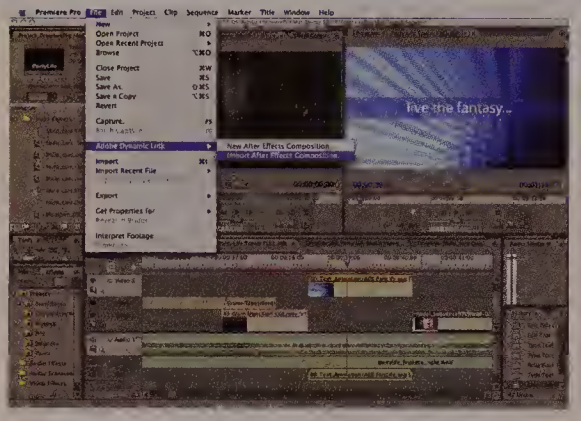
APPLE TV AND iPHONE ARE AMONG WINNERS

Best of Show

Every January, the editors at *Macworld* scour the show floor at Macworld Conference & Expo and pick the coolest products for Best of Show honors. The products must be recent releases or make their debut at Expo. This year, we chose 11 products that stood out in a crowded field. (For a Best of Show video podcast featuring our editors talking about our picks, go to macworld.com/2487.)

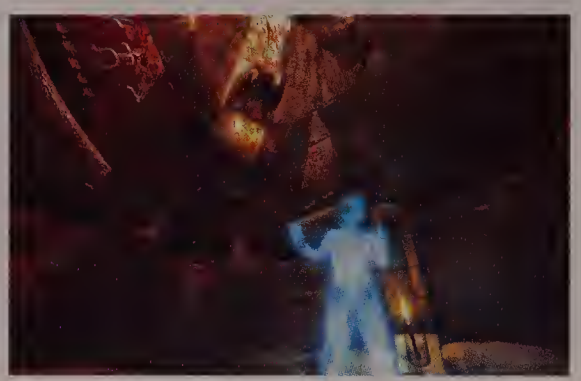
Toast 8 Titanium, from Roxio: The venerable disc-burning application has a long list of new features, and a few really stand out. Toast 8 is the official provider of TiVoToGo video extraction for the Mac, is the first to offer Blu-ray burning and reading, and adds professional audio features from the company's Jam application ($100; www.roxio.com).

Parallels Desktop for Mac Release Candidate (Build 3120), from Parallels: The virtualization program that let users run Windows, Linux, and other operating systems from within OS X has long-awaited support for USB 2.0 devices, a floating Coherence mode, and true drag-and-drop capabilities ($80; www.parallels.com).



Adobe Premiere Pro, from Adobe: Dropped from the Mac in 2003, Premiere is back—this time as a Pro version that will run only on Intel-based Macs. It'll also be part of a larger Adobe Production Studio suite that will include Adobe Encore DVD and Adobe Soundbooth—the former brought over from the Windows side to compete with DVD Studio Pro, the latter a new cross-platform sound app (pricing not yet set; www.adobe.com).

Adobe Photoshop CS3, from Adobe: The free December 2006 beta release of Adobe's flagship image-editing application had people buzzing as they were heading into Macworld Expo. Adobe Photoshop CS3 adds Intel-native support (see "Photoshop Beta Tests Are In," page 28). Equally significant, the updated software adds a number of features, from a new palette look to a Quick Selection brush to a new Refine Edge palette, that are sure to impress longtime users.



Prey, from Aspyr Media: This first-person shooter tells the story of Tommy, a Cherokee garage mechanic who must face an alien menace that has abducted his people and his girlfriend. Prey features the ability to walk on walls; Death Walking, in which Tommy fights spirits to regain health and spirit energy before returning to his own body; and Spirit Mode, in which Tommy can leave his body and sneak up on enemies in spirit form ($50; www.aspyr.com).

George, from Chestnut Hill Sound: This new iPod clock radio features a detachable face that doubles as a remote control, which provides full access to the iPod's navigation menu on an LCD screen. The system has a patent-pending "bandless" tuner and station presets that you can assemble by category. The clock radio is also designed to support the addition of new digital audio sources, such as the upcoming HD radio tuner upgrade ($549 to $599; www.chillsound.com).

IntelliScanner mini, from IntelliScanner: A tiny, portable scanner-and-software package, the IntelliScanner mini helps you organize collections and home assets, using bar-code technology. You scan and store a list of books, DVDs, wine, comics, and other possessions and then transfer the info to the IntelliScanner software apps on your Mac ($299; www.intelliscanner.com).

ModBook, from Axiotron and OWC: Rather than wait for Apple, Axiotron developed an aftermarket hardware modification to turn a MacBook into a tablet computer running OS X. The ModBook replaces the top of the MacBook with a 13.3-inch wide-screen LCD with Wacom touch-screen technology. There's even an optional GPS module available—all in a tough magnesium top shell (starting at $2,279; www.macsales.com).

MultiSync LCD2690WUXi-BK, from NEC: A 25.5-inch wide-screen display with 1,920 by 1,200 pixels, the LCD2690WUXi-BK features a Horizontal in Plane Switching module for superior color representation, has an 800:1 contrast ratio, and includes a detachable stand that is height-adjustable and can pivot, swivel, and tilt ($1,700; www.necdisplay.com).

Apple TV, from Apple: The Apple TV is the missing link between your iTunes and iPhoto libraries and your TV. You can sync the device with iTunes to store content on the Apple TV's 40GB hard drive or stream content wirelessly from a Mac or a PC to the Apple TV. For more on Apple TV, see "Inside Apple TV," page 20 ($299; www.apple.com).

iPhone, from Apple: One of the most highly anticipated Apple products, the iPhone brings together iPod, smart phone, and portable-computing features in one device. It has a wide-screen display and an innovative touch-screen input method. See "Hello, iPhone" on page 54 for complete coverage of the iPhone (4GB model, $499; 8GB model, $599; www.apple.com).

We have solutions to improve any creative process.

(Imagine what we can do for yours.)

Apple® Mac® Pro

- Ideal for high-end computing
- Dual-Core Intel® Xeon® Processor (3GHz)
- Memory: 1GB RAM
- 500GB hard drive
- SuperDrive™
- Mac OS® X 10.4

Authorized Reseller

$3746
CDW 1026367

Apple® Cinema HD Display®

- 23" digital LCD
- Panel brightness: 270 cd/m² (nits)
- Smooth motion hinge allows you to view the display anywhere from -5 to 25 degrees
- One-year limited parts, labor and backlight warranty

$999 CDW 659614

Authorized Reseller

Licensing available†

Adobe® Creative Suite 2.3 Premium plus Dreamweaver

- Combines full versions of Adobe Photoshop® CS2, Adobe Illustrator® CS2, Adobe InDesign® CS2 and Adobe GoLive® CS2, Adobe Acrobat 8 Professional and Dreamweaver 8 software and includes Version Cue® CS2, Adobe Bridge and Adobe Stock Photos
- Delivers the next level of integration in creative software

Upgrade from Creative Suite 2 Premium for Mac® $153.99 CDW 1035848
Full version for Mac® $1214.99 CDW 1035845

Adobe

The Mac Solutions You Need When You Need Them.

You'd like to spend as much time as possible focusing on your creative work. CDW has the solutions that let you do just that. Our account managers can help you find the products you need to keep the creative process going faster and more efficiently. So call today for detailed answers to all your technology questions, and get back to focusing on what you really enjoy: creativity.

CDW

The Right Technology. Right Away.™

CDW.com • 800.ALL.MACS

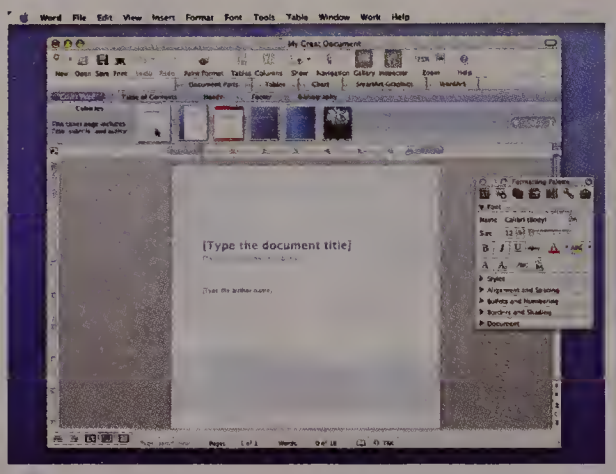
† Adobe Open Options (AOO) volume licensing; call your CDW account manager for details. Offer subject to CDW's standard terms and conditions of sale, available at CDW.com. ©2007 CDW Corporation

MICROSOFT REVEALS DETAILS OF UNIVERSAL OFFICE SUITE

Office 2008 for Mac

Apple's transition to Intel processors has been a relatively smooth one. Still, certain key applications have yet to make the jump to Intel-native code. But Microsoft's Office suite will no longer be among them when Microsoft Office 2008 for Mac becomes available in the second half of 2007.

In addition to Intel compatibility, Office 2008 will sport plenty of new features. Microsoft says that Office 2008 for Mac will share some technologies with its Windows counterpart—Office 2007—for seamless compatibility between the different versions. Both Office releases will support the Office Open XML Formats.



Office 2004 users aren't being left out of the new file formats, though. Microsoft plans to release a free beta of the file-format converters (possibly by the time you read this) so users of older versions of Office can read and write the new Office Open XML Formats. Final versions of the converters should be available six to eight weeks after Office 2008 for Mac ships.

Office 2007 for Windows includes a new user interface feature called the Ribbon, which gives users quick access to specific tools. The Mac version will include similar features called the Elements Gallery and Document Parts, which can automate some common tasks, such as adding a table of contents or headers and footers to documents.

"We really worked hard on the user interface of Office 2008 for Mac," says Sheridan Jones, group marketing manager for the Microsoft Macintosh Business Unit. "But we worked just as hard on enhancing the usability."

Other new features of Office 2008 for Mac include a Publishing Layout view, which lets users create layout-rich documents in Word (title pages, for example), and Excel Ledger Sheets, which provides templates for common financial-management tools such as budgets, invoices, and check registers—without requiring users to whip up complex formulas.

Another smaller application that will be included with Office 2008 is called My Day. The stand-alone app lets users track priorities and stay on top of Entourage Tasks without launching Entourage.

Microsoft did not announce pricing for Office 2008.—JIM DALRYMPLE

INTERNET BEAT

Fetch 5.2, from Fetch Softworks (www.fetchsoftworks.com): File-transfer program introduces WebView, a new way for viewing files in a Web browser and copying Web addresses ($25; upgrades, free for Fetch 5 users and $15 for Fetch 4 users).

Sandvox 1.1, from Karelia Software (www.karelia.com): Visual Web page editor adds eight site designs and features more thorough built-in help, among other changes (Standard, $49; Pro, $79; upgrades, free).

Zend Studio 5.5, from Zend (www.zend.com): New version of Integrated Development Environment for PHP adds support for PHP 5.2, anti-aliasing, Web services code completion that supports URLs in SoapClient constructors, and Intel Macs (Standard, $99; Professional, $299).

IMAGING BEAT

Geophoto, from Ovolab (www.ovolab.com): Photo-browsing application displays pictures by location instead of by date. It places images on a three-dimensional globe, showing where in the world pictures were taken, and it lets you share with others ($50; preorder price, $40).

ImageWell 3, from XtraLean Software (www.xtralean.com): Image-editing software adds support for secure FTP uploads, graphical watermarks, and batch processing for multiple images at once ($15).

Snapshot 2.0, from Stunt Software (www.stuntsoftware.com): Photo-printing utility formerly known as PhotoBooth features a new interface; photo borders; and the ability to add date stamps, speech, and thought balloons to photos ($30; upgrade, free).

NEWS IN BRIEF

Intel Releases Core 2 Quad Processors

During the Consumer Electronics Show in Las Vegas, Intel added three quad-core processors to its lineup. The high-end Core 2 Quad runs at 2.4GHz and is designed to alleviate the processing bottlenecks encountered with high-definition video entertainment and multimedia. Intel is positioning two other new chips—the Quad-Core Xeon 3200 series, which comes in 2.13GHz and 2.4GHz speeds—based on their power efficiency for entry-level server applications. There's a good chance you'll see at least one of Intel's quad-core processors in a new Mac—most likely Apple's high-end Mac Pro or Xserve—in the near future.

Apple Drops *Computer* from Its Name

Near the end of his Macworld Expo keynote address, Apple CEO Steve Jobs announced that the company is changing its name from Apple Computer to simply Apple. The name change reflects the company's newfound emphasis on consumer electronics, and it came after a presentation that featured no new Mac computers. "The Mac, iPod, Apple TV, and iPhone. Only one of those is a computer," said Jobs. "So we're changing the name."

iTunes Store Adds Paramount Movies

Before spending the bulk of his keynote talking about Apple TV and the iPhone, Steve Jobs announced that Paramount Studios would be joining Disney in offering feature-length movies for sale on the iTunes Store. The addition of more video content from a second major movie studio brings the iTunes Store's number of movies to more than 250. Included in the Paramount offerings are classics such as *Breakfast at Tiffany's* and *Chinatown,* comedies including *School of Rock* and *Zoolander,* and the entire *Star Trek* saga. Jobs also told the audience that Apple had sold 1.3 million movies on the iTunes Store in the four months since its launch.

BEAT ICONS BY PAUL HOWALT

Turn your old iPod into your new toolbox.

TECHTOOL Protogo

Do you have an old iPod lying around? Or perhaps a small portable hard drive or flash drive? Why not turn it into the ultimate Macintosh diagnostic, repair, and maintenance tool? With TechTool Protogo it's easy. Protogo allows you to quickly create a bootable diagnostic device that contains Micromat's most powerful tools as well as any of your own utilities you may wish to install. You can then use this device to boot, check, maintain, and repair Macintosh computers as needed. Like our award-winning product, TechTool Protege, you will have a device that allows you to carry **all the tools you'll need** in your shirt pocket. But unlike Protege, you'll have plenty of space left over for a multitude of additional utilities as well as ample drive space when you need to recover data.

TechTool Protogo ships on a DVD that includes the Protogo configuration application, TechTool Pro Classic (for Mac OS 9 systems and below), TechTool Pro 4 (for Mac OS X), and DiskStudio. Protogo includes several profiles for standard system/utility configurations so that you can easily set up a device for your particular needs. Simply select the device, select the desired profile and then press a single button. Protogo will format and configure the device and then install all of the system files and tools you'll need. You can also create and save your own profiles that include the custom components you desire (even including third-party utilities). The standard profiles range from a minimal bootable system with TechTool Pro 4 and DiskStudio, to a full-blown Mac OS X installation including a Finder, Classic, and multiple utility programs.

A device created by Protogo boots and runs software much faster than from a CD/DVD repair disk. It also includes memory swap space for the Mac OS, which increases speed and stability as well. In addition, you can re-configure the device at any time to add new utilities, updated versions of software or newer versions of the Mac OS.

TechTool Protogo gives you the power to create and maintain your own pocket-sized toolkit for the Macintosh – exactly the way you want it – on one portable device. Just plug it in and all your tools will be at your fingertips.

MICROMAT INCORPORATED

Mac Universal

800-829-6227
707-566-3831
www.micromat.com

With Protogo, you will be able to create a portable diagnostic device that can...

- Boot up most Macintosh computers
- Diagnose and repair hard drive problems
- Test major hardware components
- Find viruses*
- Find system conflicts*
- Optimize and defragment hard drive volumes
- Rebuild volume directories
- Recover data from damaged volumes
- Repartition hard drives without losing data
- Boot different Mac OS versions from different partitions
- Run a variety of utilities
- And much more...

* Features denoted with * are only available on OS 9 compatible systems when used with the included TechTool Pro Classic application.

Micromat suggests using devices with a FireWire port (such as older iPods) for maximum system compatibility.

©2007 Micromat Inc. All rights reserved. TechTool is a registered trademark of Micromat Inc. TechTool Protege, TechTool Protogo and DiskStudio are trademarks of Micromat Inc. iPod is a trademark of Apple Computer Inc.

Manage your SUBSCRIPTION with a simple click!

Using our Subscriber Services web site is the fastest way to take care of any of your Macworld subscription inquiries.

Your online service options allow you to:

- Pay for your subscription
- Change your mailing address
- Sign up for continuous service
- Give a gift subscription
- Renew your subscription
- Inquire about missing/duplicate issues
- Contact us directly with your questions

Save time! Go to:

service.macworld.com

LONGTIME *MACWORLD* CONTRIBUTOR PASSES AWAY

Farewell, Bruce Fraser

In December 2006, longtime friend and colleague Bruce Fraser passed away. He succumbed, after a short bout with lung cancer, a few weeks shy of his 53rd birthday. To many of us, he was a warm, gregarious man and a loyal friend. To anyone who has ever read his columns, reviews, or books, he was a writer of wonderfully clear and often highly opinionated prose. To those fortunate enough to see him speak, he offered valuable tips and tricks with a minimal amount of technobabble and a fair helping of Scottish humor.

Bruce defined himself as a "color geek," and that he was. Long before any of us were paying attention to RGB, CMYK, or ColorSync, Bruce was knee-deep in it, largely a result of his frustration and fascination with the first generation of scanners for the Mac. He turned his passion for color into his profession, advancing from product reviewer and user to book author, lecturer, and guru. Later in his career, as one of the cofounders of PixelGenius, he became a software developer of a sort, helping create a suite of Adobe Photoshop plug-ins because no one else was making the tools that he needed to use in his own work. Over the years, we joked about the rise of "Bruce, Inc.," but he never lost interest in helping one more person

GAME NEWS

Avernum 4 Goes Universal

Spiderweb Software has announced the release of Avernum 4 1.1, an updated version of its fantasy role-playing adventure game for the Mac. The new version runs natively on Intel and PowerPC-based Macs. It's a free update for registered users. Avernum 4 is the latest installment of the long-running series that puts you in a subterranean kingdom. Monsters from the lower tunnels have returned, and gigantic beasts are ravaging the cities of Avernum.

Feral Releases Imperial Glory

At long last, Feral Interactive is releasing more Mac games, including Imperial Glory—which was developed by Pyro Studios, makers of the Commandos series. Imperial Glory is a strategy game set during the Napoleonic era, in which you try to achieve economic, diplomatic, and military domination over your rivals. A demo version of the game, which is Universal, should be available soon.

World of Warcraft Adds Multithreaded OpenGL

Blizzard Entertainment has released an update to World of Warcraft. Among other things, the 2.0.1 update now supports multithreaded OpenGL on Intel-based Macs running OS X 10.4.8 or later. Much of what OpenGL does is dependent on the Mac's CPU, not its graphics hardware. Multithreaded OpenGL distributes the processing of complex 3-D–graphics scenes between multiple processors, or cores, on Intel-based Macs. Blizzard says that multithreaded OpenGL can double the performance of World of Warcraft, depending on your Mac's hardware capabilities and the settings specified. Up until now, it's been available only in beta builds of the Burning Crusade expansion pack.—PETER COHEN

BEAT ICONS BY PAUL HOWALT

overcome some problem with Photoshop or digital photography.

By the time I became *MacWeek's* reviews editor in 1990, Bruce was one of our primary contributors, turning out review after review of scanners, digital imaging applications, color-management tools, and digital cameras. He was fair in his reviews but was never afraid to call a product bad when it was. To him, software and hardware development was a process that was never finished. Something could always be made a little bit better—and to the developers who were willing to listen, he often provided valuable feedback. He was one of Photoshop's first big champions, and he regularly spurred Adobe, in print and behind the scenes, to make the program better.

Bruce worked as hard for *MacWeek's* sister publication, *MacUser*, as he did for *MacWeek*, and when those publications went away, he brought his talents to *Macworld*. Unfortunately for us, the demands on Bruce's time, as well as the conflicts inherent in his relationship with Adobe and his role as a software developer, meant that we weren't able to use him as much over the past few years, but he never ceased to act as an advisor and mentor to many of us at *Macworld*.

The undulating circumstances of life brought me further away from both reviews and San Francisco, and, as a result, I saw less of Bruce in recent times. But every time I ran into him—in the lab, at Macworld Expo, or randomly on the street—he greeted me with warmth and concern for my general well-being. That's the kind of guy Bruce was. He had his prickly side (I *did* mention that he was highly opinionated), but at heart, he was a good man. Bruce, Inc. might be no more, but there are thousands upon thousands of people who were touched in some way by the things Bruce did.

Peace, my friend.—RICK LEPAGE

CREATIVE BEAT

AdForce 5, from Managing Editor (www.maned.com): Ad-layout software adds Universal binary support to run natively on PowerPC- and Intel-based Macs, as well as an integrated search function that supports Tiger's Spotlight (contact Managing Editor for pricing).

Posterino 1.0, from Zykloid Software (www.zykloid.com): Composing application creates Life Posters, postcards, greeting cards, and contact sheets from digital pictures. The app includes an automatic-placement feature for putting dozens of photos on a poster, and it lets you export your poster or postcard as a TIFF or JPEG, ready to be processed via the iPhoto Kodak print service ($25).

SOHO Business Cards 2, from Chronos (www.chronosnet.com): Business-card–design software features a revamped interface and more than 15 feature additions such as a smart inspector, a business-card wizard, and a favorites bin for reusing design elements ($40; upgrade, $20).

ViaCAD, from Punch Software (www.punchviacad.com): Design software due out in March automatically creates 2-D details from 3-D designs and offers interoperability with Google SketchUp, AutoCAD 2007, Adobe Illustrator, and other common 3-D formats ($99).

PRODUCTIVITY BEAT

3D Weather Globe & Atlas 2.0 Professional Edition, from Software MacKiev (www.mackiev.com): Upgraded version of global atlas software features higher resolution, real-time weather visualizations, and the ability to tilt the horizon (with one year of free weather reports included, $60; upgrade from standard version, $30).

Billings 2, from Marketcircle (www.billings2.com): Time- and finances-management software for small and home businesses includes customizable templates for estimates, envelopes, and invoices; a menu-bar timer to control the app; and Universal support for Intel Macs ($59; upgrade, free).

docXConverter, from Panergy (www.panergy-software.com): Utility enables Macs to open and use files created in Microsoft Word 2007's new .docx format ($20).

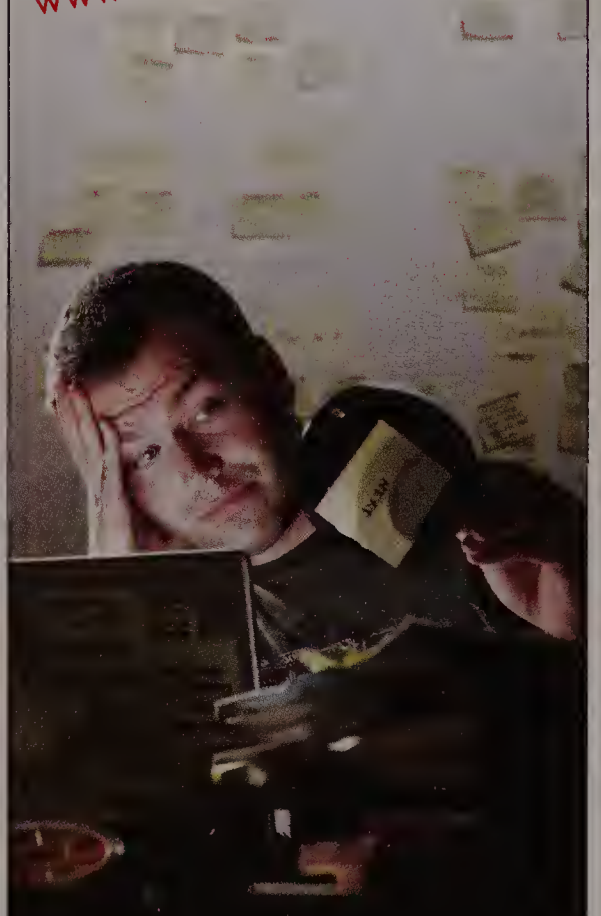
Indigo 2.0, from Perceptive Automation (www.perceptiveautomation.com): Updated home-control and -automation server includes support for Intel Macs and the ability to graphically create Web pages that are capable of controlling all devices ($180; existing customers are eligible for a $90 credit toward the upgrade).

"NoteBook is a must-have if you're using your computer as a true digital hub."
Tera Patricks, Mac360.com

"NoteBook is now open on my desktop all the time."
Shawn King, Host/Exec. Producer, Your Mac Life

ACTIVATE YOUR IDEAS

download a FREE DEMO at www.circusponies.com/demo



CIRCUS PONIES NOTEBOOK
organization for a creative mind

★★★★★ Macworld UK

MacAddict RATED GREAT

Macworld

NoteBook is available at: CompUSA and the Apple Store

Mac Universal

The runaway hit of Macworld!

CS3 SHOWS PERFORMANCE BOOSTS ON INTEL MACS

Photoshop Beta Tests Are In

As soon as we got our hands on the beta version of the Intel-native Adobe Photoshop CS3, Macworld Lab ran three basic tests on a few Intel and some PowerPC Macs: launching Photoshop CS3 with a 50MB file; running our standard suite of 14 scripted tasks on that 50MB file; and running a batch suite that executes three tasks (rotate, resize, and save) on 100 stock photo images. We also ran the same tests in Photoshop CS2.

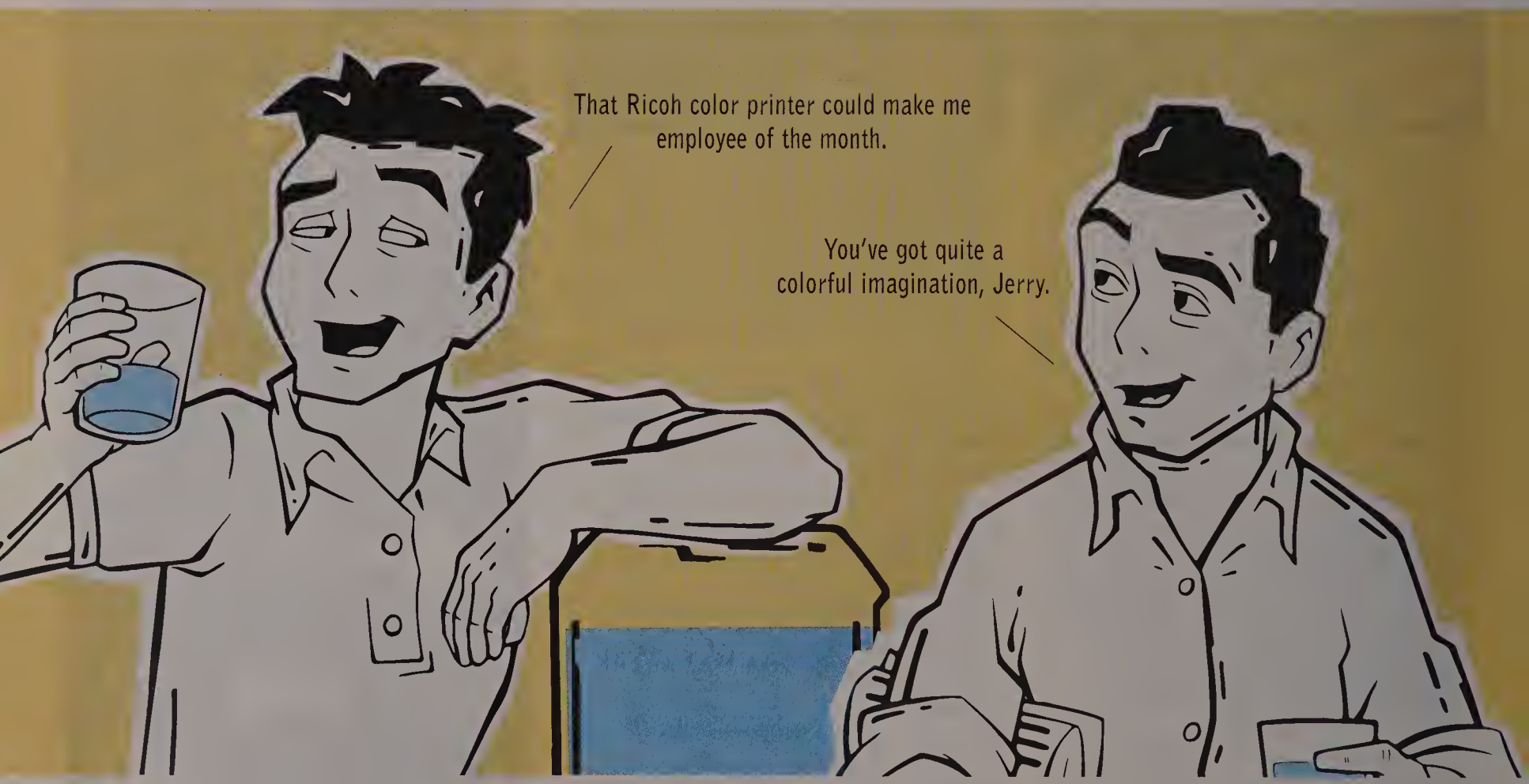
Photoshop CS3 showed significant speed increases running on Intel Macs, as opposed to CS2 running in Rosetta on those same systems. In all the tests, the Intel Mac (a Mac Pro or a MacBook Pro) beat its corresponding PowerPC cousin (a Power Mac G5 or a PowerBook G4), but the four-core Power Mac G5 kept pretty close in overall speed to the Mac Pro.

Laptop users will probably feel the performance benefits of the CS3 beta the most. I've definitely noticed an improvement on my MacBook Pro, especially when running operations like complex sharpening tasks on big images. As Adobe continues to tweak Photoshop's code until the program is released, we can expect performance to improve even more.—RICK LEPAGE

Macworld Lab Tests	Adobe Photoshop CS3 Beta	Adobe Photoshop CS2	Adobe Photoshop CS3 Beta	Adobe Photoshop CS2	Adobe Photoshop CS3 Beta	Adobe Photoshop CS2
	STARTUP	STARTUP	SUITE	SUITE	BATCH	BATCH
15-inch MacBook Pro Core 2 Duo/2.33GHz	0:26	0:42	0:51	1:26	2:25	4:42
15-inch PowerBook G4/1.67GHz	0:32	0:32	1:43	1:52	4:24	4:14
Mac Pro Xeon/2.66GHz	**0:15**	0:32	**0:31**	1:02	**2:11**	4:04
Power Mac G5 Quad/2.5GHz	0:19	**0:16**	0:45	**0:54**	2:31	**2:22**
	<Better	<Better	<Better	<Better	<Better	<Better

BEST RESULTS IN **BOLD**.

All tests were run in Adobe Photoshop CS3 Beta and Adobe Photoshop CS2 version 9.0.2. All systems were running Mac OS X 10.4.8 with 1GB of RAM, with processor performance set to Highest in the Energy Saver preference pane when applicable. The Startup test involved opening Photoshop with a 50MB file. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 70 percent and History was set to Minimum. The Batch test executed three automated tasks on 100 stock photos.—MACWORLD LAB TESTING BY JAMES GALBRAITH AND BRIAN CHEN



zCover®

fashionable protection cases

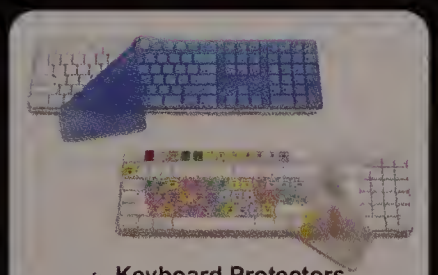
Dress it, Express yourself.

A Leading Producer of Silicone Protectors
Trend-setting Fashionable Cases, Excellent Protection & Fit
Extraordinary Durability
Functionality with Elegance, Technology with Inspiration

Macworld AWARDS 2006
Nomination

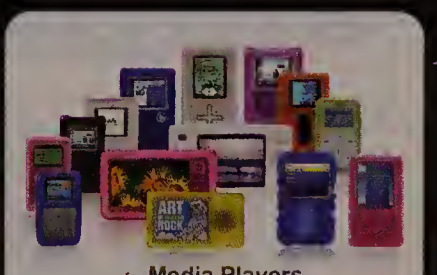
for the one you love

for Smart Phones



for Keyboard Protectors

zCover Windshield Clip with Apple IPhone



for Media Players

other zCover products Please visit www.zcover.com for detail on additional products

All the other trademarks are the property of their respective owners.

zCover.com

APPLE FACES LAWSUIT OVER iTUNES AND iPOD LINK

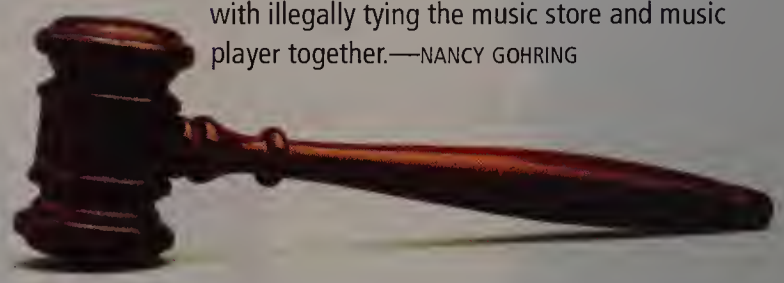
Too Much Integration

Apple has a huge hit on its hand with the combination of the iPod and the iTunes Store, but at least one customer thinks the integration has gone too far. She filed a lawsuit against Apple precisely over the tying of its iTunes Store to the iPod digital music player.

Apple revealed the suit, which was submitted in July 2006 to the U.S. District Court for the Northern District of California, in a filing with the U.S. Securities and Exchange Commission at the end of 2006. The suit was filed by a user, Melanie Tucker, and seeks class-action status. It alleges that Apple violates antitrust laws by refusing to allow music bought on the iTunes Store to be played on any digital music player other than an iPod. The suit also charges Apple with not making it clear to customers that music from the iTunes Store and the iPod are incompatible with music and devices offered by other companies.

The suit asks that Apple be forbidden to continue to support the exclusive tie-in between iTunes and the iPod, as well as pay damages to anyone who has bought an iPod or music from the iTunes store after April 28, 2003. Late in 2006, the court denied Apple's motion to dismiss the suit.

A consumer group in France filed a similar suit in early 2005 that is still ongoing. And consumer groups in several Nordic countries are preparing a case against Apple, also charging it with illegally tying the music store and music player together.—NANCY GOHRING



STORAGE BEAT

LaCie d2 Blu-ray Drive, from LaCie (www.lacie.com): External Blu-ray drive comes with Roxio's Toast and records, rewrites, and reads 25GB and 50GB BD-R and BD-RE discs, as well as DVD-DL and CD-RW discs ($1,149).

Mercury Elite-AL Pro Mirror drive, from Other World Computing (www.macsales.com): RAID 1 external hard disk drive with FireWire 400, FireWire 800, and USB 2.0 inputs comes in capacities ranging from 250GB to 750GB (pricing starts at $350 and is based on capacity).

OneTouch III Mini Edition, from Maxtor (www.maxtorsolutions.com): USB 2.0, bus-powered hard drive features integrated automatic backup software and comes in capacities ranging from 60GB to 160GB (pricing starts at $130 and is based on capacity).

SoftRAID 3.6, from SoftRAID (www.softraid.com): Updated software RAID utility adds the ability to boot Intel Macs from SoftRAID-configured volumes, as well as support for 64-bit memory in the new Intel EFI booting architecture, which is used in Mac Pros and Intel-based Xserves ($129; upgrade, free).

TechTool Protogo, from Micromat (www.micromat.com): Mac OS X application turns an old iPod into a bootable diagnostic tool containing Micromat utilities for diagnosing and repairing hard drives ($135).

MULTIMEDIA BEAT

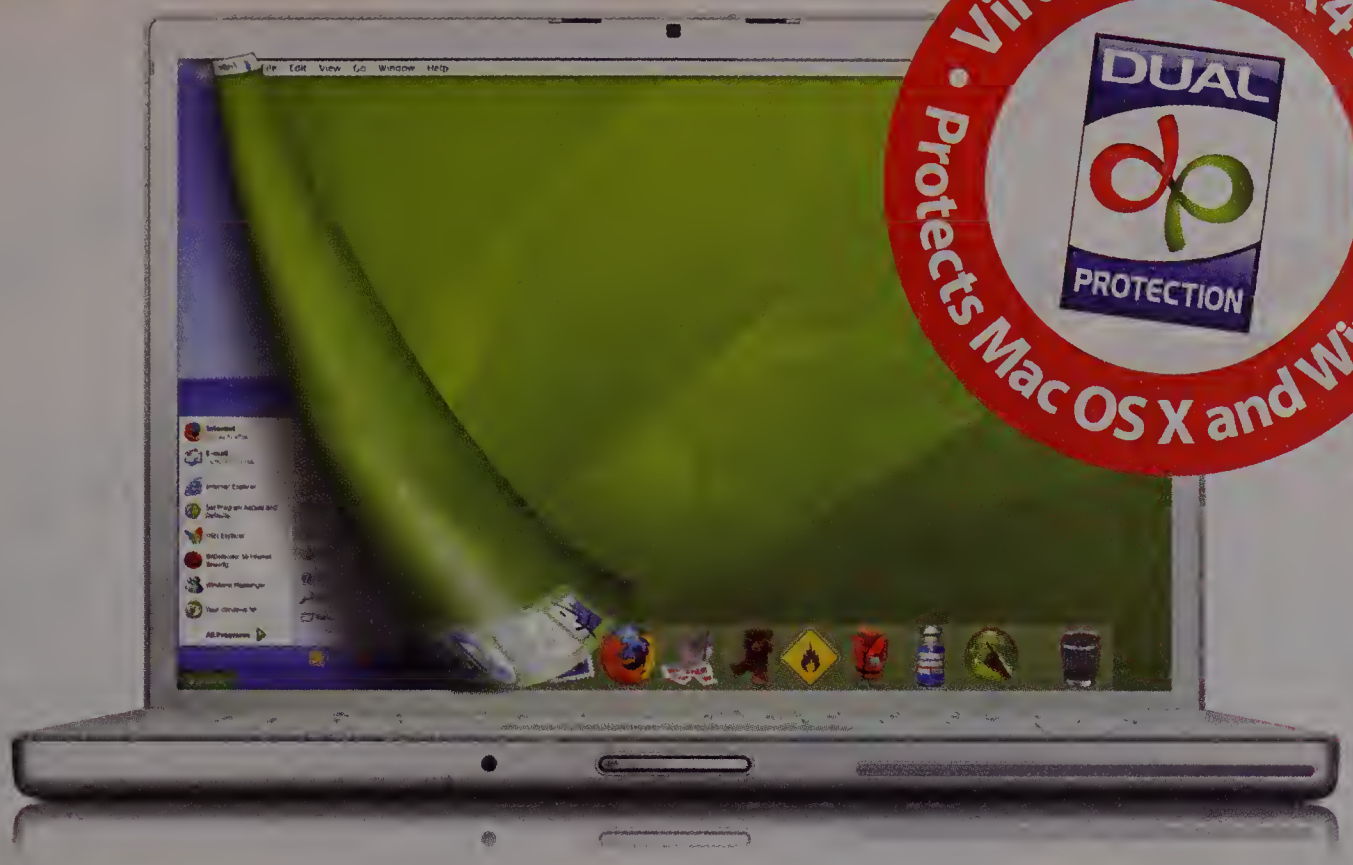
TuneStudio, from Belkin (www.belkin.com): Four-channel audio mixer designed for fifth-generation iPods lets users plug in up to four different instruments or audio sources to record audio onto an iPod for instant playback ($180).

DC220, from Canon (www.usa.canon.com): DVD camcorder features a 35× optical zoom lens, a miniSD memory-card slot that can record still images at 1,024-by-768-pixel resolution, and the ability to record in 16:9 wide-screen high-resolution format ($449).

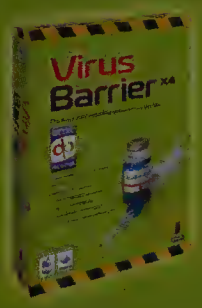
Drive + Play 2, from Harman Kardon (www.harmankardon.com): Updated automotive iPod-integration unit includes a wireless control knob, a color screen, and voice prompts so that drivers can hear what menu they're browsing without taking their eyes off the road ($400).

TVMini HD+, from Miglia Technology (www.miglia.com): USB device imports analog cable TV, unencrypted digital cable, and free-to-air HDTV signals to a Mac (pricing not set at press time).

Xacti HD2, from Sanyo Digital (www.sanyo.com): High definition video camera records to SDHC flash-media cards, features a 10× optical zoom, and sports 1,280 by 720 progressive HD video scanning at 30 frames per second ($700).



The #1 Mac antivirus solution and the #1 Windows antivirus program in a single package



Running Windows on a Mac is possible with today's Intel-based Macs, but this opens up a whole new range of security threats. Viruses, spyware, adware and hackers are all waiting to infect your Windows installation.

Intego, the leader in Mac security software, and BitDefender, the top PC security vendor, have joined forces to offer you **Intego Dual Protection**.

Protect Mac OS X and Windows from all known viruses with **Intego VirusBarrier X4 DP***.

Keep Mac OS X and Windows safe from hackers, vandals, viruses, spyware, spam and phishing with **Internet Security Barrier X4 Antispam Edition DP****.

Now, more than ever, you need full protection for both Mac OS X and Windows. Intego Dual Protection gives you all the security you need.

#1 Virus Barrier + #1 bitdefender

VirusBarrier rated best Mac antivirus by Macworld - BitDefender rated best Windows antivirus by PC World

---

* Contains Intego VirusBarrier X4 and BitDefender Antivirus. ** Contains Intego NetBarrier X4, VirusBarrier X4, Personal Antispam X4, and BitDefender Antivirus, Firewall, Antispyware, Antispam and Antiphishing.
Macintosh, Mac, the Mac logo and Apple Mail are registered trademarks of Apple Computer. BitDefender and the BitDefender logo are registered trademarks of Softwin.
© 2001 - 2007 Intego, the Intego logo, VirusBarrier, the VirusBarrier logo, Dual Protection (DP) and the Dual Protection logo are registered trademarks of Intego.
All other brand and product names are or may be trademarks of, and are used to identify products or services of, their respective owner. Intego is not responsible for omissions or errors in typography or photography.

Macworld Conference & Expo
JANUARY 9-12, 2007
The Moscone Center - San Francisco
Booth S 2338

www.intego.com

intego

newegg.com®

ONCE YOU KNOW, YOU NEWEGG.

[Enter Promo Code MCW10307 for a FREE T-SHIRT with these items]

Fast Shipping Without Pit Stops.

99% of our orders ship within 1 business day.

Western Digital

$459.99

Western Digital My Book Pro WDG2TP10000N

1TB 7200 RPM USB 2.0 / IEEE 1394a / 1394b

Western Digital

$259.99

Western Digital

My Book Pro 500GB 7200 RPM WDG1T5000N

Western Digital

$249.99

Western Digital

My Book Premium 500GB 7200 RPM WDG1C5000N

Western Digital

$159.99

Western Digital

My Book Pro 250GB 7200 RPM WDG1T2500N

LACIE

$139.99

Lacie 301146U

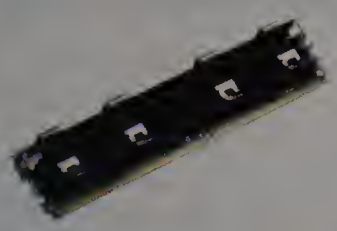
D2 320GB 7200 RPM 3.5"

USB 2.0 IEEE 1394a / 1394b

NO PAYMENTS FOR 6 MONTHS with your *Newegg.com* Preferred Account

See website for more information. Promotion ends 04/30/0

Transcend



$379.99

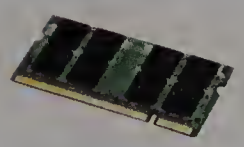
Transcend TS2GAPMACP6K-T
2GB DDR2 667 (PC2 5300) Memory for Apple Mac Pro

A-DATA

$237.99

A-DATA SCQPE1A16K
2GB (2 x 1GB) DDR2 667 (PC2 5300) Dual Channel Kit Memory for Apple Desktop

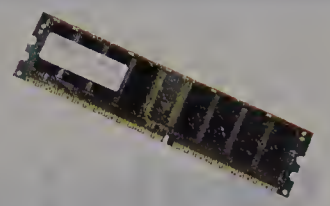
<m



$125.99

Mushkin 971504A
1GB DDR2 667 (PC2 5300) Memory for Apple Notebook

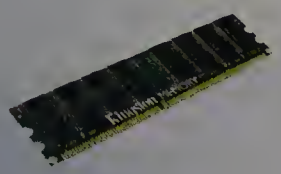
TECHWORKS



$117.99

Techworks 12565-0001
1GB DDR 400 (PC 3200) Memory for Apple Desktop

Kingston TECHNOLOGY



$73.99

Kingston KTA-G4/512
512MB PC100 Memory 168-Pin SDRAM for Apple Desktop

XEROX.

$349.00

Xerox 6110/B
Laser Personal Color Printer Up to 2400 x 600 Image

XEROX.

$179.00

Xerox 3124/B
Laser Personal Monochrome Printer Up to 1200 x 600 Image

VANGUARD

$13.99

Vanguard Mondo 6C/black
Black Genuine Leather Case For iPod Video or iPod Nano

• 99% of orders ship within 1 business day • Over 500,000 product reviews from customers
• "A" rating on ALL merchant ranking sites • Over 50,000 customer testimonials

GRIFFIN

$27.99

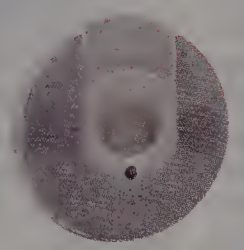
Griffin 9781-TRP30BK
Black FM Transmitter with Dock Connector for iPod

GRIFFIN

$13.99

Griffin 4002-TJUICE
White TuneJuice Battery Backup for iPod & iPod mini

macally



$14.99

Macally IP-N111
White Portable Stereo Speakers for iPod nano

WENGER

$57.99

Wenger GA-7303-13
Black/Red/Gray 15.4" MAXXUM NoteBook Backback

BELKIN

$49.99

Belkin F8Z082-BLK
Black TuneTalk Stereo for iPod with video

BELKIN

$7.99

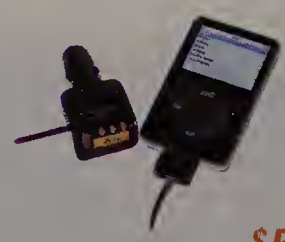
Belkin F8V235-07GLD-AP
White Stereo Link Cable for iPod, 7 ft.

Kensington

$67.99

Kensington 33350
White Entertainment Dock 500 for iPod Wireless Radio Frequency Remote

Kensington



$51.99

Kensington K33199
Black Digital FM Transmitter/Auto Charger for iPod

ng on Availabili ... Newegg ... not responsible for ...ating or other errors and reserves the right to cancel orders arising from such errors. All items ... as retail unless otherwise noted. OEM products may be sold ... ng ... ation or other articles

OUTSTANDING:
VERY GOOD:
GOOD:
FLAWED:
UNACCEPTABLE:

Which All-in-One Is Right for You?

Multifunctions Print, Scan, Fax, and Copy in Living Color

BY JAMES GALBRAITH AND MELISSA RIOFRIO

Hewlett-Packard Photosmart C7180

We're all busy tackling several projects at once, so naturally we expect our machines to multitask as well as we do. That's why multifunction printers (MFPs), sometimes called all-in-ones or multifunctions, are growing in popularity.

An MFP combines print, copy, scan, and sometimes fax functions in one occasionally large or odd-looking package. This combination—long a staple of the PC universe and increasingly common in the Mac market—is especially attractive for personal use, small or home-based businesses, and even busy satellite or executive offices.

Today's MFPs perform better than ever, and they're becoming more acceptable for people who want a graceful, versatile, and integrated printer, scanner, copier, and fax machine but who don't have the money and space for separate single-function machines.

Macworld looked at some new sub-$1,000 color laser MFPs and a selection of their lower-cost, ink-jet counterparts—all of these multifunctions can print, copy, scan, and (in some cases) fax in color. (For a review of the color laser MFPs, see "Color Laser MFPs: Speedy, Precise, and Pricey.")

When you shop for an MFP, keep one thing in mind: What an MFP provides in convenience, it sometimes lacks in capabilities. A particular MFP may excel at faxing but may offer only lackluster printing, or vice versa. In any case, color is the way to go.

Ink-Jets

Ink-jet MFPs represent the largest and most popular category of all-in-ones on the market. They cost less initially—the models we review here cost between $100 and $400—and until recently, they were the only option for color output in this price range. They're compact and easy to move around, which is useful for the small office–home office crowd. Print quality has improved over time as well; you can print crisp text (though special paper usually plays a supporting role) and nice-looking images. And ink-jets can produce lab-quality photos, something laser printers can't quite match.

However, ink-jets MFPs tend to print slowly, and quality often suffers when you print lower-resolution images through the copy, scan, or fax functions. Also, the cost of replacement inks can quickly overtake

PHOTOGRAPHY BY PETER BELANGER

Brother MFC-665CW

RATING: ♦♦♦½
PROS: Full-featured color fax; built-in Ethernet and 802.11g wireless networking; ADF.
CONS: Sluggish print speeds.
PRICE: $200
OS X COMPATIBILITY: 10.2 (Jaguar), 10.3 (Panther), 10.4 (Tiger)
COMPANY: Brother, www.brother.com
MORE INFO: See macworld.com/2472 for a longer review.

Canon Pixma MP960

RATING: ♦♦♦♦
PROS: Large LCD; duplex printing; transparency scanning; large paper capacity.
CONS: Expensive; limited connectivity options.
PRICE: $400
OS X COMPATIBILITY: 10.2 (Jaguar), 10.3 (Panther), 10.4 (Tiger)
COMPANY: Canon, www.canon.com
MORE INFO: See macworld.com/2473 for a longer review.

REVIEWS YOU CAN TRUST Macworld rates only final shipping products, not prototypes. What we review is what you can actually buy.

the cost of the unit, making an ink-jet best suited for lower-volume use (say, for an individual or a very small office).

Lasers

Color laser MFPs may cost more, but they address many of the shortcomings of ink-jet multifunctions. They're generally faster and have better print quality overall, especially on copies and prints of scanned images. They're also designed to handle higher volumes—thousands of pages per month, as opposed to hundreds on an ink-jet. While these machines cost more up front, replacing toner and other consumables usually costs less over time. But even if price is no object, space or logistics might be. Color laser MFPs are much bigger and heavier than ink-jets, and they could easily overwhelm a closet-size office or a cubicle. However, for high-volume use, they are the better choice.

Function, Not Price

Because MFPs vary widely in how well they handle certain tasks, decide which are most important to you and then shop accordingly. If you need the absolute best and most fully featured printer or scanner, for example, you may be better off getting a stand-alone unit.

All MFPs print capably and accommodate standard paper sizes (letter and legal, as well as envelopes and other small pieces). Two-sided printing, or duplexing, features vary: Some printers handle it manually; some, automatically; and a few, not at all. If you print documents that have more text than images, or roughly a fifty-fifty mix, you might be better off with a laser printer. Its text quality will be better than that of an ink-jet, and its image quality, while not quite on a par with what you'd expect from a photo lab, will probably be quite pleasing. An ink-jet may give you better-quality photos, but ink-jets are slower at this task than lasers. Volume is the final factor; the more pages you print per month, the more you need a laser.

When it comes to copying, it's about letter versus legal, as well as volume. Most MFPs come with a flatbed scanner that takes only letter-size documents (the machines with legal-size flatbeds are wider), but some models have a second scanner head that works with an automatic document feeder (ADF), so you can make a copy of a legal-size contract, say. If you make only occasional low-volume, letter-size copies, then you can probably do without an ADF.

Your Call, Please The Brother MFC-665CW lets you get rid of your office telephone.

Pay for What You Need

The typical office scanner's functions—scanning to fax, copy, or e-mail, or to send through an OCR (optical character resolution) app to get editable text—involve resolutions ranging from 200 dots per inch (dpi) to 600 dpi, well within the optical resolutions of most MFPs' scanners. What's more, some of these scanners' interpolated resolutions are sometimes as high as 19,200 dpi (though 9,600 dpi is more common), which is more than enough for scanning photos, maps, and other detailed images. All the MFPs offer some variety of scanning, OCR, or photo-editing software, ranging from rudimentary to full-fledged. Don't base your purchase on the bundle; you can always buy your own applications.

E-mail and the Web have certainly cut into fax traffic. Even though you might talk yourself into wanting a fax machine just in case you need it someday, think seriously about whether you'd use it enough to justify the cost. If you'd use it only for faxing signed documents a few times a year, you might be OK visiting a local copy shop and paying a dollar or two per page.

If you know that you need a fax, then you're in luck: many MFPs, especially laser ones, are highly fax-capable and usually offer an abundance of features. Conveniences include programmable speed dial—some machines will let you store dozens or even hundreds of numbers. For businesses that rely heavily on faxing, fax transmission during off-hours can save time and phone charges, while *polling* (one fax machine asks—or polls—another fax machine to send it a fax) and *forwarding* (that is, sending incoming faxes automatically to another fax machine) make managing incoming and outgoing fax traffic easy. Fax storage capacity lets you hold faxes until you want to print them, preventing incoming faxes from spilling all over the place. Color faxing is a fairly new and fun feature, but of course it works only if the recipient has a compatible color machine.

Photo-Card Support

Many of the ink-jet MFPs, and some color laser models, come with slots for digital

Epson Stylus Photo RX580

RATING: ♦♦♦♦

PROS: Superior photo quality; smudge-, water-, and fade-resistant prints.

CONS: Limited connection options; no fax.

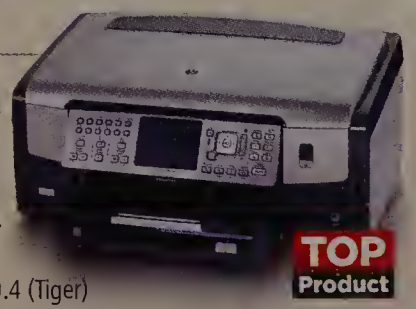
PRICE: $200

OS X COMPATIBILITY: 10.3 (Panther), 10.4 (Tiger)

COMPANY: Epson, www.epson.com

MORE INFO: See macworld.com/2474 for a longer review.

HP Photosmart C7180



RATING: ♦♦♦♦

PROS: Ethernet and 802.11g wireless networking; memory-card slots; transparency scanning; color fax machine; large LCD.

CONS: Expensive; quirky software; no ADF.

PRICE: $400

OS X COMPATIBILITY: 10.3 (Panther), 10.4 (Tiger)

COMPANY: Hewlett-Packard, www.hp.com

MORE INFO: See macworld.com/2475 for a longer review.

camera memory cards. These slots simplify the transfer of digital photos to your computer, where you can use software (bundled with the MFP) to fine-tune your images. Some models even have control-panel LCDs so you can preview and print photos without your Mac. If you're really picky about your photos, choose an ink-jet MFP, which will give you better overall results.

Color MFPs are even more enticing now that laser models are available. While many people might be content with a smaller, simpler ink-jet machine, the speed and higher-volume capabilities of lasers are giving busy offices better options than they've ever had before.—MELISSA RIOFRIO

Living Color
The Canon Pixma MP960 gives you a large LCD monitor to see the photo you're printing with its six inks.

Ink-Jet MFPs Are for Photos

When we decided to review a selection of ink-jet MFPs, we kept the filter wide open: we asked the vendors to send us the model of their choice, as long as it was an ink-jet, included a flatbed scanner, and was Mac-compatible. The five we ended up with vary quite a bit: the very affordable Lexmark X5470 ($100); the fax-focused Brother MFC-665CW ($200); the photo-centric Epson Stylus Photo RX580 ($200); and two photo ink-jets that incorporate slide and film scanning, the Canon Pixma MP960 and the Hewlett-Packard Photosmart C7180 (both $400). And even though all the models we looked at have their merits, we found that the Epson was the best bet for photographers, while the HP was the best all-around ink-jet MFP of the bunch.

I've Been Set Up!

Four of the five MFPs have the same color scheme—silver and black. The Lexmark is unique, with a white and silver case. And although the Brother and Lexmark look smaller than the others at first glance, all of these printers take up roughly the same amount of space when their paper guides are extended and scanner lids are opened. If space is an issue, the Brother actually does take up about four less inches of horizontal space with the scanner lid open, and it isn't as deep as the other MFPs.

All of the MFPs we looked at connect to your Mac via USB. This is the easiest connection, and in some cases the fastest, but if you need to share the device on a network, it would be best to get a model that includes Ethernet. The networked models we looked at—the HP and the Brother—offered 10/100 Ethernet as well as wireless 802.11g transceivers. The Lexmark offers 10/100 Ethernet and 802.11g wireless connectivity as options that cost $129 and $149, respectively, but we did not test them. Of the two ink-jet MFPs that shipped with built-in networking, the HP was far easier to set up than the Brother, which had PC-specific instructions for the wireless and less-than-intuitive instructions for the wired Ethernet connections. Once set up, both worked as advertised, allowing us to scan from the unit to our Mac and print from our Mac to the printers without a problem. Interestingly, the Brother was slower when connecting over the network, especially when scanning, while the HP performed the same or faster when connected in that way.

Fax Facility

Three of the ink-jet MFPs, the Lexmark, the HP, and the Brother, feature built-in color fax machines, meaning that they can fax in color. However, the color capability is necessary on the *receiving* fax machine for this function to work properly. The Brother takes its telephone features the furthest, even allowing you to ditch your office phone by offering built-in voice mail, a telephone handset, and a speakerphone feature.

While these MFPs were able to send and receive faxes, the Brother and the Lexmark feature ADFs, making it easier to fax a small stack of documents. The HP, on the other hand, requires that you scan each sheet individually; you must lift the lid and lay each sheet on the flatbed—a tedious task for anyone who has a lot of faxing to do.

Camera Cards

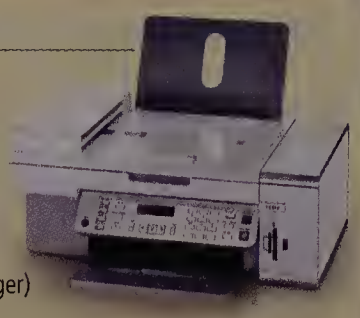
All of the ink-jet MFPs we looked at have card slots to fit most camera memory cards, but their photo capabilities varied greatly. All but the Lexmark offer preview LCDs, which make choosing, editing, and printing photos from your memory card much easier. Without a preview LCD, the Lexmark requires that you print out a proof sheet containing small circles (like the ones on standardized tests) under a thumbnail image of each photo on your card. You fill in the proof sheet with a pen or pencil to specify the photo(s) you'd like to print and the size and paper type. Once you've filled out the sheet, place it on the scanner bed, and the unit reads it and "fills" your order.

Three of the printers—the Canon, the Epson, and the HP—use six inks to print photos, adding light magenta and light cyan to the cyan, magenta, yellow, and black inks that the Brother and Lexmark use. The downside to having more inks is that the cost of replacing your ink tanks is higher, so if you don't plan on printing photos on your MFP, you might want to consider a four-ink model. All but the Lexmark use individual

continues on page 40

PHOTOGRAPHY BY PETER BELANGER

Lexmark X5470



RATING: ♦♦♦
PROS: Inexpensive; color fax; ADF.
CONS: No individual ink cartridges; must swap cartridges for photo printing; no LCD; slow; lines in some images.
PRICE: $100
OS X COMPATIBILITY: 10.3 (Panther), 10.4 (Tiger)
COMPANY: Lexmark, www.lexmark.com
MORE INFO: See macworld.com/2476 for a longer review.

Brother MFC-9420CN

RATING: ♦♦♦
PROS: Very fast; extensive fax features; ADF.
CONS: Middling image output quality; networking-software problems; confusing controls; no duplexing; noisy.
PRICE: $700
OS X COMPATIBILITY: 10.2 (Jaguar), 10.3 (Panther), 10.4 (Tiger)
COMPANY: Brother, www.brother.com
MORE INFO: See macworld.com/2477 for a longer review.

Color Laser MFPs: Speedy, Precise, and Pricey

Your MFP choices used to be pretty simple: you chose a monochrome laser MFP for nice text and copies but boring everything else; or an ink-jet MFP for a welcome splash of color—but diminished speed and copy quality. Ink-jet MFPs have proliferated, offering some nice advantages for a lower price. Now that color laser MFPs are available for less than $1,000, ink-jet MFPs have some serious—if pricey—competition.

Two of the three color laser MFPs we tested, Brother's MFC-9420CN and Epson's AcuLaser CX11NF, occupy the high end of the sub-$1,000 category, offering a fairly wide range of print, scan, copy, and fax features. HP's Color LaserJet CM1017 MFP costs the same but weighs a little less than these two; it also lacks fax functionality but adds some nice photo features.

Epson AcuLaser CX11NF

More for the Money

If you're shelling out roughly $700 for a color laser MFP (compared with $200 to $400 for an ink-jet model), you'll naturally expect to get more for your money. We looked for faster print times, crisper text, and comparable graphics quality (ink-jet photos tend to look smoother than laser photos). We also expected scans and copies to look better—ink-jets tend to exaggerate the flaws of lower-resolution images.

Here's what we found: With laser MFPs, you're definitely getting more machine. Prepare to clear some space in your office for these taller, heavier units, and include clearance for raising the scanner cover, opening various access doors, and letting air run across the vents that cool the oven-hot unit. The HP model requires some additional clearance to accommodate the output tray that extends from its front.

Setting up the machines via USB is as simple as setting up any printer: you install the drivers from the CD and then plug the printer's USB cable into a free USB port on your Mac. The CD that we received with the HP didn't work with Macs, so we had to download the drivers from HP's Web site. According to HP, this problem was detected before any units were shipped to stores, and units purchased today should include the proper software in the box.

Installing to an Ethernet network generally involved simply following the directions, but the process was a bit trickier in some cases. The Brother network installation, for instance, includes an automated polling feature that set off alarms on our network.

Doing Everything, Succeeding Sometimes

Epson's AcuLaser CX11NF is the best color laser MFP we've tested, combining strong speed with good overall output quality and ease of use. While the Brother is sometimes faster, and the HP is sometimes easier to use, neither was as strong overall as the Epson.

The Brother was often the fastest in our timed tests, but the output it produced was not always the best. It churned out a ten-page Word document in just 33 seconds and a 22MB Photoshop image in 38 seconds—noticeably faster than the Epson. But while it managed to print plain text very well, its photographs and other images lacked sharpness and color saturation. Its scan speeds (62 seconds to print an 8-by-10-inch photo at 600 dpi, and 91 seconds to scan a 4-by-6-inch photo at 1,200 dpi) lagged behind the Epson's, but the prints generally looked equally good. Running the same tests via Ethernet actually made the unit slower, because the printer divides its available memory among all the functions instead of devoting it all to the task at hand.

The HP machine's output quality is as good as or better than its Brother competitor's, but it's so slow that it might as well be an ink-jet. It comes with an 8-ppm (page per minute) engine, compared with 31 ppm for the Brother and 25 ppm for the Epson. Not surprisingly, the HP needed 93 seconds to print our ten-page Word document and over three minutes to print our 22MB Photoshop image. The HP's scan times followed suit, taking up to three times as long—and in the case of our 1,200-dpi scan, an agonizing 6 minutes and 42 seconds. Printing and scanning the same documents via Ethernet took less time, but the HP was still the slowest laser MFP overall. That's too bad, because its print quality is nearly as good as that of the Epson.

Copy 'til You Drop

Everyone likes color copies. All the color MFPs we tested offer the usual host of features and copy fairly well (though copies were somewhat fuzzy and off color compared with the originals); the big difference lies in how they handle the documents. Both the Brother and the Epson have automatic document feeders (ADFs) with their own scanner heads, so you can copy multipage documents and even legal-size ones. Those two models could easily handle the demands of a busy office. The HP has no ADF, only a letter-size scanner platen (which the Brother and the Epson also have), so it's limited to occasional, very light-volume copying.

Early MFPs evolved from fax machines. Even though e-mail and the Internet have supplanted faxing to a large degree, both the Brother and Epson units still offer a full array of fax features (although we wish their control panels were better organized). Both offer 33.6-Kbps modems. The Brother offers a broader array of fax features

continues on page 40

Epson AcuLaser CX11NF

RATING: ♦♦♦♦

PROS: Inexpensive; speedy; ADF.

CONS: Large; tricky network setup; some PC-only features.

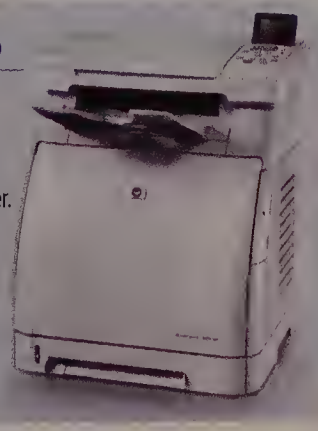
PRICE: $700

OS X COMPATIBILITY: 10.2 (Jaguar), 10.3 (Panther), 10.4 (Tiger)

COMPANY: Epson, www.epson.com

MORE INFO: See macworld.com/1669 for a longer review. (Printer has been retested since the Web site review.)

HP Color LaserJet CM1017 MFP



RATING: ♦♦♦

PROS: Good output quality; easy to use; memory-card slots; useful photo features; inexpensive.

CONS: Slow; no fax or ADF; can't copy legal-size paper.

PRICE: $700

OS X COMPATIBILITY: 10.3 (Panther), 10.4 (Tiger)

COMPANY: Hewlett-Packard, www.hp.com

MORE INFO: See macworld.com/2471 for a longer review.

MULTIFUNCTION PRINTERS: TEST RESULTS AND SPECIFICATIONS

	INK-JETS					LASERS		
	Brother MFC- 665CW	Canon Pixma MP960	Epson Stylus Photo RX580	TOP Product HP Photosmart C7180	Lexmark X5470	Brother MFC-9420CN	TOP Product Epson AcuLaser CX11NF	HP Color Laser-Jet CM1017 MFP
Timed Trials: Print[A]								
10-page Word document	3:32	**1:10**	3:15	1:45	3:59	**0:33**	0:56[F]	1:33
1-page Word document	0:34	**0:09**	0:21	0:16	0:29	**0:15**	0:32[F]	0:28
22MB Photoshop image	6:24	**1:40**	2:04	4:15	5:35	**0:38**	1:05[F]	3:15
4-page PDF	3:03	1:54	1:54	**1:52**	4:23	**1:04**	1:39[F]	3:34
Timed Trials: Scan[B]								
8 × 10-inch, 600-dpi scan	**0:45**	1:43	1:07	2:03	1:50	1:02	**0:40**[F]	1:35
4 × 6-inch photo, 1,200-dpi scan	**0:48**	2:15	3:31	2:40	1:07	1:31	**0:29**[F]	6:42
Jury Tests: Print[C]								
Graphics–fine lines, gradients	Good	**Very Good**	Good	**Very Good**	Fair	Fair	**Good**	**Good**
22MB Photoshop image quality	Good	Very Good	**Superior**	Good	Good	Fair	**Very Good**	Good
Text quality	**Very Good**	**Very Good**	**Very Good**	**Very Good**	Good	**Very Good**	**Very Good**	**Very Good**
Jury Tests: Scan and Copy[C]								
Scan (photo image quality)	**Good**	**Good**	**Good**	**Good**	**Good**	Good	**Very Good**	Good
Scan (resolution chart)	Good	Good	Good	**Very Good**	Fair	**Good**	**Good**	**Good**
Copy (copy quality)	Good	**Very Good**	**Very Good**	Good	Fair	**Good**	**Good**	**Good**
Specifications								
Print resolution	6,000 × 1,200 dpi	9,600 × 2,400 dpi (color); 600 × 600 dpi (black)	5,760 × 1,440 dpi	4,800 × 1,200 dpi (color); 1,200 dpi (black)	4,800 × 1,200 dpi (color); 1,200 × 1,200 (black)	2,400 × 600 dpi	2,400 × 2,400 dpi	600 × 600 dpi
Optical scan resolution	600 dpi	4,800 dpi	1,200 dpi	4,800 dpi	600 dpi	1,200 dpi	600 dpi	1,200 dpi
Maximum scanning bit depth (output)	24 bit	24 bit	48 bit	48 bit	24 bit	24 bit	24 bit	24 bit
Connection	USB 2.0, Ethernet, wireless, PictBridge	USB 2.0, IrDA, optional Bluetooth	USB 2.0	USB 2.0, Ethernet, PictBridge, wireless, Bluetooth	USB 2.0, PictBridge, optional Ethernet and wireless	high-speed USB 2.0, Ethernet 10/100BaseT	USB 2.0, Ethernet	USB 2.0, Ethernet
Paper sizes (in inches)	A4, A5, executive, legal, letter, photo (4 × 6, 3.5 × 5, 5 × 7, 5 × 8)	4 × 6, 4 × 8, 5 × 7, 8 × 10, credit card (2.13 × 3.39), legal, letter, U.S. No. 10 envelopes	ink-jet printable CDs and DVDs, letter, photo (borderless 4 × 6, 5 × 7, 8 × 10, 8.5 × 11)	4 × 6, 5 × 7, 8 × 10, borderless panorama (4 × 10, 4 × 11, 4 × 12), legal, letter	4 × 6, legal, letter, up to 8.5 × 17, U.S. No. 10 envelopes	A4, legal, letter, up to 8.5 × 14	up to 8.5 × 14	executive, legal, letter, Monarch envelopes, U.S. No. 10 envelopes
Installed RAM/Maximum RAM[D]	32MB	N/A	N/A	64MB	N/A	64MB/576MB	128/576MB	96MB
Cost to replace ink and toner cartridges[E]	$50 ($19 for black; $10 each for cyan, magenta, and yellow)	$102 ($16 for pigment black; $14 each for black, cyan, magenta, yellow, photo cyan, and photo magenta)	$120 ($20 each for black, cyan, magenta, yellow, light cyan, and light magenta)	$68 ($18 for black; $10 each for cyan, magenta, yellow, light magenta, and light cyan)	$67 ($20 for black, $25 for photo color, $22 for color)	$583 ($149 for black; $145 each for cyan, magenta, and yellow)	$275 ($76 for black; $66 each for cyan, magenta, and yellow)	$324 ($75 for black; $83 each for cyan, magenta, and yellow)
Weight (in pounds)	17.7	26.5	18.3	26.0	14.0	76.7	73.0	49.0
Dimensions (height × depth × width, in inches)	7.1 × 14.6 × 18.4	8.9 × 16.9 × 18.6	11.2 × 19.3 × 18.2	8.5 × 18.3 × 15.4	7.6 × 12.6 × 17.9	21.0 × 20.2 × 19.0	26.2 × 18.4 × 18.1	21.3 × 20.0 × 17.2
Paper capacity	100 sheets	300 sheets	120 sheets	100-sheet input tray; 20-sheet automated 4 × 6 photo-paper tray	100 sheets	250 sheets; 530 sheets optional paper capacity	180 sheets; optional 500-sheet cassette	250 sheets
Special features	2.5-inch color LCD; color fax; phone; answering machine; wireless printing.	Duplex printing; 3.5-inch TFT display; easy scroll wheel; transparency scanning.	Clarla Hi-Definition Ink (smudge-, scratch-, water-, and fade-resistant); prints on CD/DVDs.	3.6-inch LCD; transparency scanning.	ADF for copier; proof-sheet scanning for photo prints; color fax.	Backlit LCD (16 characters by 2 lines); ADF.	Duplex printing; ADF.	Flip-up screen; duplex printing.

N/A = not applicable. [A]Measured in minutes: seconds. Best results in **bold**. [B]Scores are for reflective media only. Measured in minutes: seconds. Best results in **bold**. [C]Scale is Superior, Very Good, Good, Fair, and Poor. Best results in **bold**. [D]Many ink-jet manufacturers do not report installed RAM. [E]Yields may vary. [F]Times and jury results have been updated since this printer was first tested. For original results, go to macworld.com/1669.

Bluetooth | BluePin™ Technology | Made for iPod

Mobile Phone with
Bluetooth wireless technology

iLuv i199

Bluetooth Stereo Ear Clips | i212

It's all about

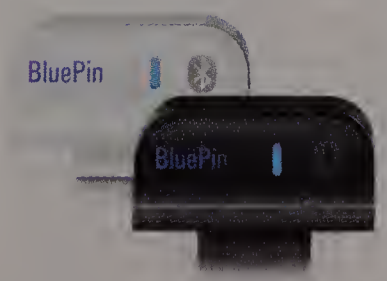
Give & Take

Send your favorite tunes wirelessly to the i199 or receive them wirelessly from it. If your audio device, cell phone or computer is equipped with Bluetooth wireless technology, the i199 can play music through its jAura speakers.

If you have headphones with Bluetooth wireless technology, you can listen to music from your CDs, MP3 CDs, AM/FM radio or iPod. How can this be?

The secret is the BluePin. With the BluePin on the i199, music can be received and sent wirelessly. Whatever you want, i199 with BluePin makes it happen.

"Wireless freedom from the little BluePin"

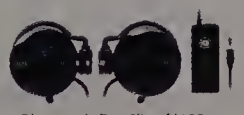


Based on the open Bluetooth wireless stereo standard, the patent-pending BluePin transmitter/receiver from iLuv is the first technology of its kind to enable music streaming from any MP3 player, laptop, mobile phone or handheld devicewith Bluetooth wireless technology to an iLuv BluePin-enabled HiFi system, easily sharing your personal music content without wires. At the same time, BluePin technology from iLuv allows users to transmit their personal music collection from an iLuv HiFi system to other devices equipped with Bluetooth wireless technology, such as headphones or an additional set of home entertainment speakers.

iLuv Bluetooth Products

Hi-Fi Audio System with Bluetooth | i277

Noise-Canceling Bluetooth Headphones | i903



Bluetooth Ear Clips | i202

Bluetooth Ear Clips | i214

iLuv products are available at fine retailers like Best Buy, Circuit City, Target.com, J & R Music World, Staples, EXPO and Fry's.

iLuv™

www.i-Luv.com | INNOVATIVE LIFESTYLE & UNQUESTIONABLE VALUE

iLuv and BluePin are trademarks of jWIN Electronics Corp. iPod is a tradmark of Apple Computer Inc. The Bluetooth word and Bluetooth logo are trademarks of Bluetooth SIG Inc. iPod is not included. For more information on iLuv products, please call 1-866-807-5946 or 1-516-626-7188

Which All-in-One Is Right for You?

continued from page 36

ink tanks—so if you run out of magenta, for example, you replace only the magenta tank instead of a multiple-color tank in which there may still be plenty of cyan, yellow, and black ink.

Can You Handle It?

All the MFPs we tested can hold at least 100 sheets of plain, letter-size paper. The Canon uses two trays—a top-loading sheet feeder and a paper tray beneath the unit. Together they can hold up to 300 sheets. With two trays, you can either load them with paper and not worry about running out for a long a time, or use different types of paper in each tray—for instance, plain paper in the sheet feeder and photo paper in the tray. This allows you to switch between document types without having to swap paper. The HP also has a second tray, but it is limited to just 20 sheets of 4-by-6-inch photo paper—not quite as flexible as the Canon but still handy.

Plan to Scan

A printer with a flatbed scanner gives you more versatility in terms of what you can scan—magazines, books, or other objects such as leaves or hands. But the automatic document feeders on the Brother and Lexmark models make scanning multipage documents much easier. The HP and the Canon, being more photo-oriented, include an integrated transparency adapter built into the scanning lid. And although these units don't support a large variety of film formats, they do allow you to scan multiple 35mm slides or negatives at 4,800-dpi resolution.

Speed It Up

In terms of print speed, the clear winner was the Canon, which posted the best times in three of our four speed tests. It was able to print our one-page Microsoft Word document in just 9 seconds; the closest competitor was the HP, which spit out its one-page Word document in 16 seconds, followed by the Epson, the Lexmark, and the Brother at 21, 29, and 34 seconds, respectively. The Canon also took first place when printing our 22MB Photoshop image and in the ten-page Word document test. The only print-speed test it didn't win was the four-page PDF document; at 1 minute and 54 seconds, the Canon was just two seconds behind the HP, which took home the gold in that contest. The Brother was the slowest printer in the one-page Word and the Photoshop image tests. It came in second to last in the ten-page Word test and the four-page PDF contest, with the Lexmark trailing it in both of those tests.

However, the Brother was the USB scanning speed champ, taking under a minute to scan both an 8-by-10-inch photo at 600 dpi and a 4-by-6-inch photo at 1,200 dpi. But when scanning over the network, the Brother's advantage was diminished, with scanning times more in line with the rest of the pack.

Quality Counts

To judge output quality, we assembled a panel of *Macworld* editors to rate the job each MFP did at printing, scanning, and copying a variety of documents. In the print-quality category, there was no clear winner. If you plan to focus primarily on photographic printing, you should note that the Epson earned the only Superior rating given in any test, for its beautiful 8-by-10-inch glossy print of our Photoshop test image. The Canon received a Very Good rating in this test.

All but one of the ink-jet printers earned a Very Good rating in our text-quality test. The Lexmark's text was a little less precise, but it still received a rating of Good. In our fine-lines and graphics test, the HP and the Canon took top honors; there were no breaks in their curved lines and no visible banding in gradients and color blends. The Lexmark received a Fair rating because faint horizontal lines showed up in many areas of the print.

To judge scanning quality, our panel looked at two documents—a photograph scanned at 600 dpi and a test chart scanned at each printer's highest optical resolution. In the photo scan, none of the MFPs wowed the jurors enough to earn more than a Good rating. None of the scans were so far out of whack that a little tweaking couldn't help, but none looked as good as the original. The HP was the clear winner, however, in the chart-scan test, with sharp clean detail visible in areas that the Lexmark, for example, had a hard time capturing.

Of the two scanners with built-in transparency adapters, the Canon fared better than the HP. Though both digitized our test slides, the Canon's scans had more-accurate colors and captured more detail. If you have boxes full of slides or film that you'd like to bring into the digital age, and you don't want to purchase a dedicated scanner, then the Canon is the MFP for you.

Our panel of *Macworld* editors also looked at color copies of a magazine cover (we have a few magazines lying around the office) and evaluated how well the copy matched the original. The Canon and the Epson did the best job of color-matching and accurately reproducing details. The HP and the Brother both scored Good ratings, with just a little less detail and color accuracy, and the Lexmark again earned a Fair rating, because of the same faint horizontal lines across the image.

Macworld's Buying Advice

An ink-jet MFP can be a great space saver and incorporate all of the abilities of several devices in a comparatively inexpensive package. Which unit is right for you depends on how you plan to use it. If printing photos is your main focus, buy the Epson Stylus Photo RX580. If you plan to fax a lot, be sure to look at the Brother MFC-665CW. But if you're looking for a solid jack-of-all-trades, check out the HP Photosmart C7180. We found that it had the right mix of features, speed, and quality.—JAMES GALBRAITH

Color Laser MFPs

continued from page 37

than most people will use, including 216 speed-dials (compared with 60 for the Epson) and 64MB of storage space (the Epson has just 8MB). It also offers scheduling, batching, and forwarding options and a rudimentary machine-generated cover sheet. Both offer support for color faxing to another compatible (color) machine. You can also fax directly from your Mac, as well as from the machine itself.

More Functions, Less Confusion

Whether you enjoy using an MFP often boils down to the ease of using its software and hardware controls. Brother's ControlCenter2 software and HP's Director software both let you launch scans from your computer via presets or customizable buttons. Both worked well, although their scanning features were limited. Their control panels demonstrate the importance of careful design: on the Brother, selecting one of the large buttons labeled Scan, Fax, or Copy is easy; finding the right buttons to proceed further is less obvious because they are scattered across the panel. The Epson has the same problem. The HP has the right idea: segregate the buttons for each function, and offer a large, flip-up color LCD to make reading menu choices easier. It even makes photo processing easy, offering two slots for memory cards and control-panel features for previewing and choosing images to print.

Macworld's Buying Advice

Color laser MFPs represent the future, merging the crispness and speed of the laser with the color capability previously available only on an ink-jet. In the end, the machine that best balances all these expectations is the Epson AcuLaser CX11NF. It's fast, it produces the best output overall, and it's generally easy to use. The Brother MFC-9420CN costs the same but falls short in output quality. I wish I could recommend the HP Color LaserJet CM1017 MFP as a fax-free alternative, because it's so easy to use and its output is good, but it's too slow.—MELISSA RIOFRIO

JAMES GALBRAITH is *Macworld*'s lab director. MELISSA RIOFRIO is a freelance writer specializing in printers and MFPs.

Dreaming of a faster Mac,
but can't afford the price tag?

Crucial memory is:

Available for **305 different Mac systems.**

Original-equipment-quality RAM, just like the memory that ships in a new Mac, for a fraction of what you'd expect to pay.

Tested for reliability and **guaranteed compatibility** in Mac systems.

Matched to your Mac in 3 easy clicks with our **Memory Advisor™ tool.**

Covered by a **limited lifetime warranty and free technical support** via e-mail, phone, or online chat.

Shipped FREE (on orders of $40 or more, shipped inside the contiguous U.S., for a limited time).

Boost performance with a memory upgrade
— it's like GETTING a new Mac without PAYING for a new Mac!

crucial™ TECHNOLOGY *A Division of Micron*

Get your Mac® upgrade at: **www.crucial.com/macworld**

©2006 Micron Technology, Inc. All rights reserved. Information is subject to change without notice. Crucial Technology, the Crucial logo, Memory Advisor, and The Memory Experts are trademarks/service marks of Micron Technology, Inc. All other trademarks are the property of their respective owners. Crucial Technology is a division of Micron Semiconductor Products, Inc., which is a wholly owned subsidiary of Micron Technology. Ad expires 30 days after publication.

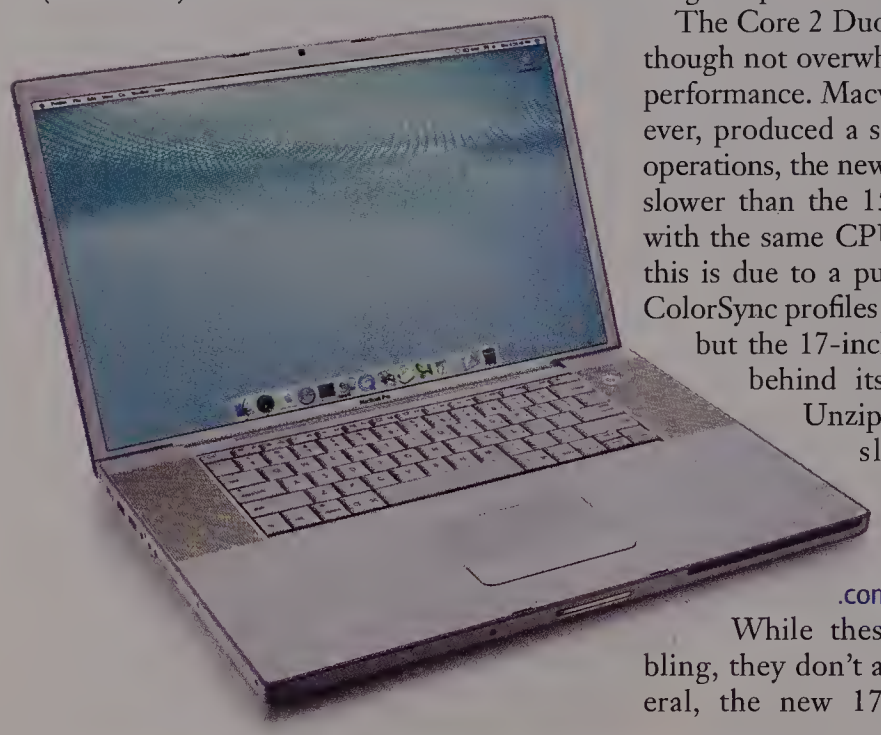
17-Inch MacBook Pro Trades Up

Core 2 Duo Model Offers Improved Speed, RAM, and Storage

BY HENRY NORR

When the time comes to update its 17-inch laptops, Apple always faces a challenge: How does it improve a machine that has just about everything?

In the case of the latest 17-inch MacBook Pro, the company stuck to the basics. Apple added the fastest Intel mobile processor available (a 2.33GHz Core 2 Duo), doubled the standard memory (now at 2GB), and boosted the hard-drive capacity (to 160GB).



In nearly every other respect, including the $2,799 price, the new 17-inch model is just like its predecessor—the same huge (1,680-by-1,050-pixel), bright wide-screen display; the same graphics card (ATI Radeon X1600 with 256MB of dedicated memory); and the same array of built-in features (an iSight camera, AirPort Extreme and Bluetooth 2.0+EDR wireless connectivity, an ExpressCard/34 expansion slot, a Gigabit Ethernet jack, a DVI-out port, an illuminated keyboard, a MagSafe power-cord connector, and so on).

The Core 2 Duo chip delivers a welcome, though not overwhelming, improvement in performance. Macworld Lab's testing, however, produced a surprising result: in some operations, the new 17-inch MacBook Pro is slower than the 15-inch model configured with the same CPU and memory. Much of this is due to a puzzling anomaly with the ColorSync profiles in the iPhoto test images, but the 17-inch model also lagged well behind its smaller sibling in the Unzip Archive test (and tested slightly slower in the Photoshop CS2 and Unreal Tournament tests). (See macworld.com/2406 for full details.)

While these test results are troubling, they don't affect most tasks; in general, the new 17-inch MacBook Pro is plenty fast. Graphics pros who have been hesitant about upgrading to an Intel-based Mac should note that the latest MacBook Pros handily outperform the fastest-ever G4-based PowerBook when running Adobe Photoshop CS2, even though the Adobe applications have to run through Apple's Rosetta code-translation technology.

RATING: ♦♦♦♦

PROS: Fast; classic design; lovely screen; ample RAM and hard-drive capacity.

CONS: Performance glitch slows some tasks; no internal modem option; no PC Card slot; few cards available for ExpressCard/34 slot; no eSATA port.

PRICE: $2,799

COMPANY: Apple Computer, www.apple.com

Macworld's Buying Advice

We can think of a few new features we'd like to see in Apple's flagship laptop—an eSATA port for external drives and maybe a built-in reader for flash-memory cards. But even without them, the 17-inch MacBook Pro is a marvelous machine. For people who can afford the price and don't mind the size and weight inevitably associated with such a large laptop, the MacBook Pro won't disappoint. □

HENRY NORR is a veteran Mac technology writer based in Berkeley, California.

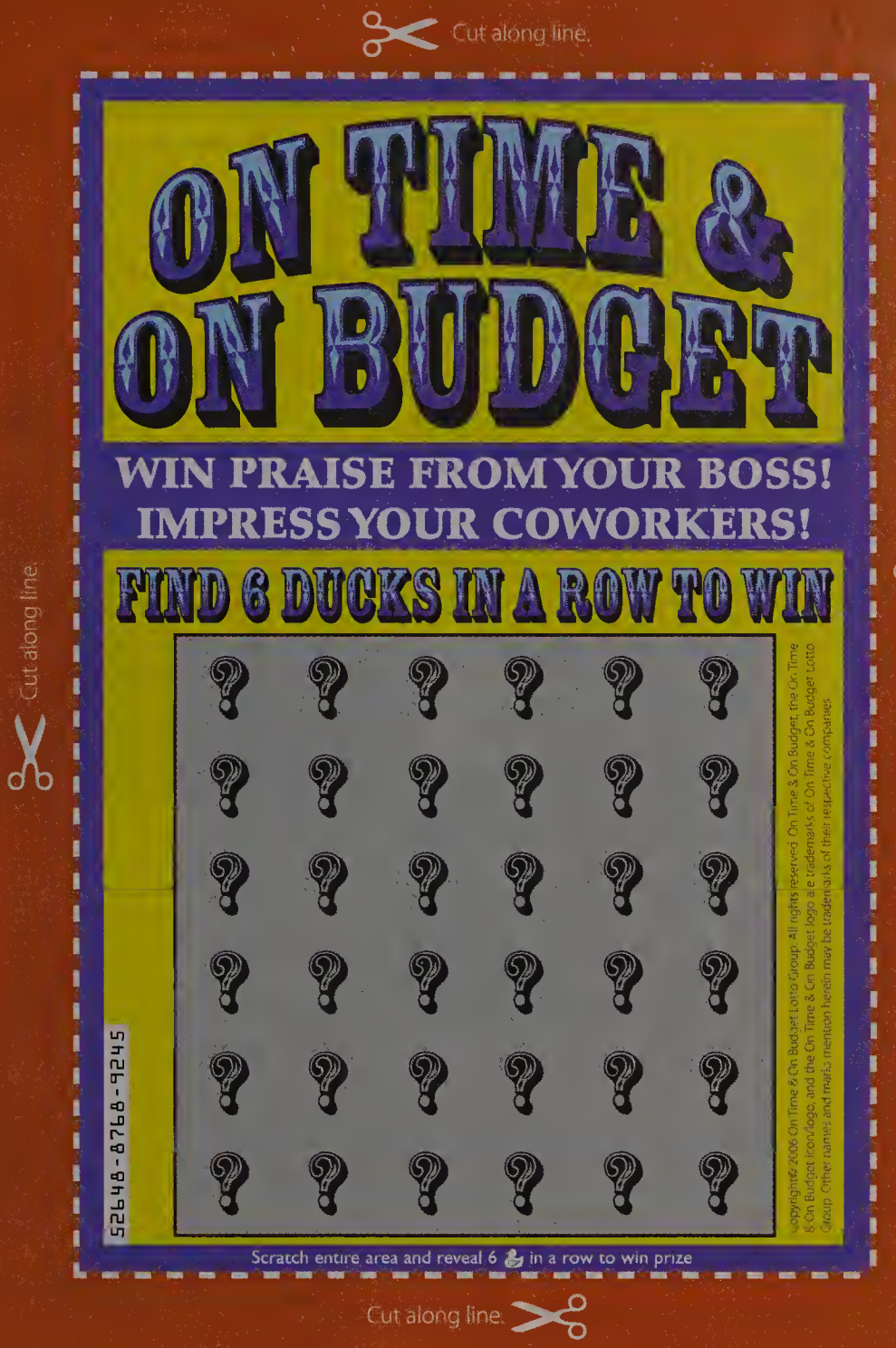
	Speedmark 4.5	Adobe Photoshop CS2	Cinema 4D XL 9.5.2	Compressor 2.3	iPhoto 6.0.5	Unreal Tournament 2004	Zip Archive	Unzip Archive
	OVERALL SCORE	SUITE	RENDER	MPEG-2 ENCODE	IMPORT PHOTOS	FRAME RATE	1GB FOLDER	1GB FILE
15-inch MacBook Pro Core 2 Duo/2.16GHz (1GB of RAM)	209	1:16	1:01	2:17	1:12	63.9	2:48	1:26
15-inch MacBook Pro Core 2 Duo/2.33GHz	**226**	**1:10**	**0:57**	2:07	**1:10**	**72.9**	2:22	1:19
17-inch MacBook Pro Core 2 Duo/2.33GHz (120GB drive)	218	1:11	**0:57**	2:07	1:21	72.4	2:24	1:33
17-inch MacBook Pro Core 2 Duo/2.33GHz (160GB drive)	211	1:12	**0:57**	**2:02**	2:55	72.6	**2:18**	1:34
13-inch MacBook Core 2 Duo/2GHz (1GB of RAM)	*178*	*1:25*	*1:14*	*2:41*	*1:15*	*17.8*	*2:53*	*1:40*
15-inch MacBook Pro Core Duo/2.16GHz (1GB of RAM)[A]	*190*	*1:40*	*1:06*	*3:02*	*1:51*	*59.0*	*2:37*	***1:17***
15-inch MacBook Pro Core 2 Duo/2.33GHz (1GB of RAM)	*222*	*1:11*	*0:57*	*2:07*	*1:12*	*72.1*	*2:39*	*1:24*
15-inch PowerBook G4/1.67GHz (1GB of RAM)	*132*	*1:35*	*3:57*	*6:59*	*2:04*	*19.9*	*3:30*	*1:32*
	>Better	<Better	<Better	<Better	<Better	>Better	<Better	<Better

BEST RESULTS IN **BOLD**. REFERENCE SYSTEMS IN *ITALICS*. [A]System tested with optional 7,200-rpm hard drive.

Speedmark is a suite of 15 tasks using the Finder and eight other applications. Only a portion of those tests are represented in this chart. The individual scores are relative to those of a 1.25GHz Mac mini, which is assigned a score of 100. Adobe Photoshop, Cinema 4D XL, Compressor, and iPhoto scores are in minutes:seconds. All systems were running Mac OS X 10.4.8, with 1GB of RAM and with processor performance set to Highest in the Energy Saver preference pane when applicable. The Photoshop Suite test is a set of 14 scripted tasks using a 50MB file. Photoshop's memory was set to 70 percent and History was set to Minimum. We recorded how long it took to render a scene in Cinema 4D XL. We used Unreal Tournament 2004's Antalus Botmatch average-frames-per-second score; we tested at a resolution of 1,024 by 768 pixels, at the Maximum setting, and with both audio and graphics enabled. The Photoshop CS2 test is not part of Speedmark and does not factor into the Speedmark overall score. To compare Speedmark 4.5 scores for various Mac systems, visit our Apple Hardware Guide at macworld.com/0815.—MACWORLD LAB TESTING BY JAMES GALBRAITH, BRIAN CHEN, AND JERRY JUNG

PHOTOGRAPH BY PETER BELANGER

For those of you who aren't using OmniPlan, may we offer an alternative solution:



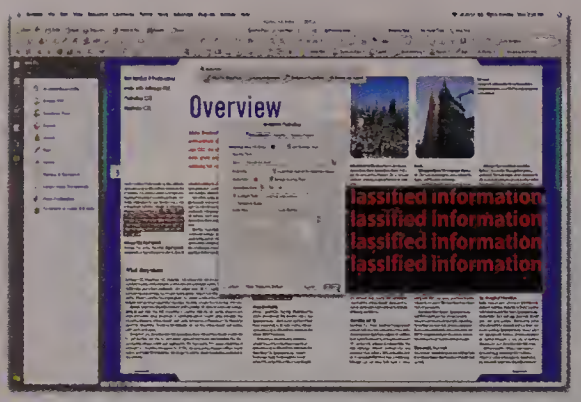
Of course, if you'd rather not gamble on the success of your projects, consider trying an application built to help you manage tasks, resources, and deadlines – all within an intuitive, easy to use interface.

OmniPlan

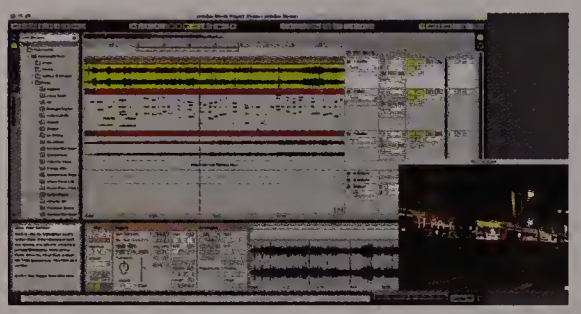
Project planning software for Mac OS X.
Free demo available. www.omnigroup.com/plan

More Reviews

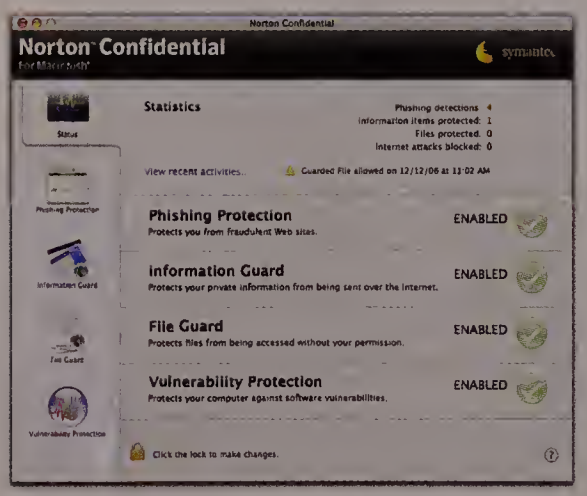
For complete reviews of the products listed here, visit www.macworld.com/reviews.



●●●●½ **Acrobat 8 Professional** ▲ ($449; upgrade, $159), from Adobe (www.adobe.com): Acrobat 8 Professional is a Universal version of Adobe's flagship application for creating and distributing PDF content. The new release looks and feels like a true Mac OS X application, and it sports a redesigned interface with customizable toolbars. The program boasts a number of productivity-boosting features and gets a speed boost on Intel Macs. The addition of Shared Reviews for collaboration purposes and the ability to sign and save PDF form data might be a compelling reason for many workgroups to upgrade (macworld.com/2460).

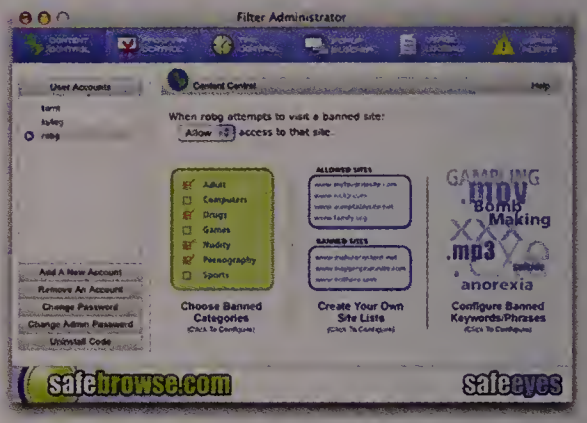


●●●●● **Live 6** ▲ ($599; download, $499), from Ableton (www.ableton.com): Live has long been a capable and creative tool for making live and studio-produced music. Live 6 expands these capabilities and—with its multiprocessor and core support and its Deep Freeze function—is a program that performs better than its predecessors. The addition of video support may even tempt people who have—until now—been happy with Apple's Soundtrack. If you're a musician seeking inspiration from your digital audio workstation, or a DJ looking for more-interesting tools than a turntable and mixer, you owe yourself a long look at Live (macworld.com/2462).



●●●½ **Norton Confidential** ▲ ($50), from Symantec (www.symantec.com): Mac users attuned to security issues know that there are many types of threats to their computers: in addition to viruses and hackers, one of today's biggest threats is *phishing,* or attempts to get users to enter their credit card numbers or passwords on bogus Web sites that look exactly like those of major online vendors, banks, and auction sites. Norton Confidential addresses this threat by examining Web sites while you're browsing and then warning you of potential fraud. Its features probably belong in a more comprehensive firewall program, however, and most users won't see the need to spend money on such a limited security program (macworld.com/2464).

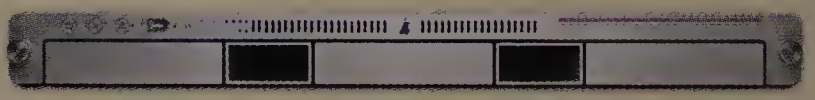
●●●● **Rocketbowl Plus** ▲ ($20), from Large Animal Games (www.largeanimal.com): Bowling is fun, but RocketBowl Plus is even more fun. It's a strange mix of bowling and minigolf set in an atomic-age milieu. The goal of the game is simple: you want to knock down all ten pins in as few rolls as possible with a rocket-propelled bowling ball. The lanes are wide-open expanses, with dips and turns, water and obstruction hazards, and no gutters to speak of—though there are plenty of places for your ball to get lost if you're not careful with your shot (macworld.com/2461).



●● **Safe Eyes 2006** ▲ ($50 per year), from SafeBrowse.com (www.safeeyes.com): From miscreants in online chat rooms to graphic images of violence and pornography, there are a lot of reasons why parents are concerned about what their children may encounter on the Web. However, monitoring our kids 24 hours a day may not be possible. Safe Eyes 2006 is a tool designed to help parents control the flow of content from the Internet into the home. It does a good job of blocking questionable Internet content, but its inability to block instant-messaging and peer-to-peer traffic leaves children exposed to things parents may not want them to see. With its non-Mac-like user interface, an annual subscription fee, and feature disparity between Mac and Windows versions, Safe Eyes is difficult to recommend (macworld.com/2465).

OS X SERVER

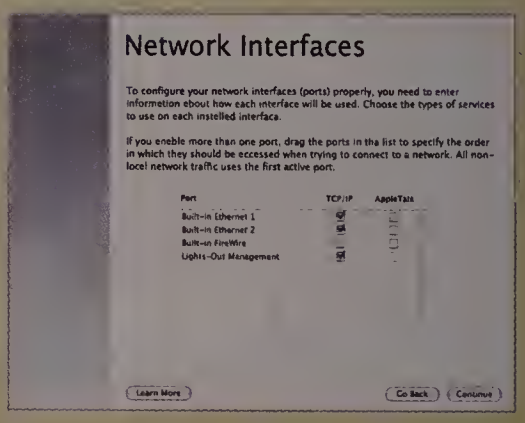
Serving It Up



●●●● **Xserve** ($2,999), from Apple Computer (www.apple.com): Now powered by Intel processors and bursting with contemporary technologies, the Apple Xserve straddles the disparate requirements of a data-center–friendly server while still being a user-friendly Mac. The Xserve's basic configuration includes two 2GHz dual-core Intel Xeon processors, 1GB of 667MHz DDR2 RAM, and an 80GB SATA disk. You can also add plenty of other options to the Xserve.

The new Xserve installs easily into a rack. Thankfully, Apple has replaced the old (and fragile) lids-and-rails combination with a traditional rail assembly. There are separate rail kits for racks with square or round holes.

The result is a high-performance Mac server, with a couple of caveats: Configuration of *lights-out management,* which allows you to remotely monitor, manage, and power the server up or down, needs to be refined. Plus, unlike the Xserve G5, this version does not offer hardware RAID—standard fare from nearly every other server vendor. Overall, though, most problems with previous versions of the Xserve have been rectified, and the new system ranks admirably among the finest of today's servers. Before upgrading, make sure your applications and third-party devices are ready for an Intel-based Mac server (macworld.com/2466).



Introducing the all new HomeDock Deluxe™

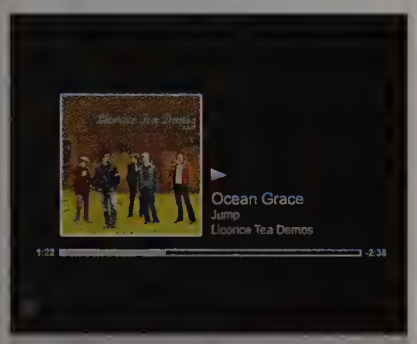
HOMEDOCK DELUXE FEATURES

ON-SCREEN MUSIC + VIDEO NAVIGATION
Navigate your iPod's music and now videos right on your big-screen TV, and control it all with the included remote.

NOW DISPLAYS ALBUM ART
See your music's full-color album art on the top status bar and on the new 'Now Playing' info screen.

NEW VIVID FULL-COLOR INTERFACE
The new HDD features over a dozen new themes and screensavers to truly customize your home iPod experience.

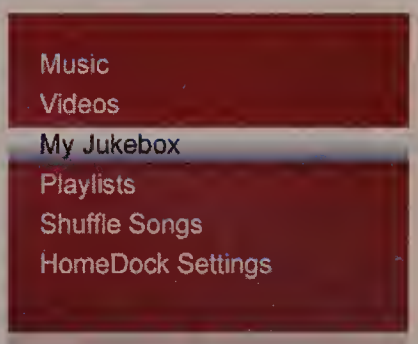
ENHANCED ON-TV NAVIGATION



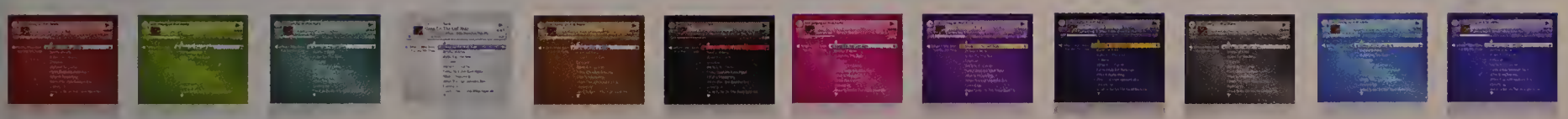
Album art
New album art info screen savers

iPod TV Shows & Movies - on TV!
Watch iTunes videos on the big screen

iPod Videos at your command
Now select iPod videos on your TV



Build a party playlist with My Jukebox
Create a custom on-the-go playlist



More colorful, more versatile
HomeDock Deluxe now features 12 new color themes to match your iPod, living room or mood perfectly.

2007 Digital Lifestyle Outfitters

iPod Gear

For more iPod-related news and product reviews, visit playlistmag.com.

Playlist Plays of the Year: 2006

Each year we pick the coolest headphones, speakers, iPod cases, and other audio-related products. Here are some of our favorites for 2006. You can find the entire list at macworld.com/2407.

Most Innovative iPod Headphones

With the **ety8**, Etymotic has created an unlikely pairing of in-ear-canal headphones (canalphones) and Bluetooth. The only cable for these canalphones is the one connecting the left and right sides behind your neck. Instead of bulky earpieces, the ety8 has small enclosures on each earpiece—the right side houses the Bluetooth components; the left side contains a rechargeable battery. A small Bluetooth transmitter connects the ety8 to your iPod's dock-connector port, and buttons on the right-hand earpiece let you control playback and volume ($199; with iPod transmitter, $299; www.etymotic.com).

Best High-End iPod Headphones

We've seen a ton of canalphones, but that didn't stop us from getting excited about Shure's new flagship model, the **E500PTH**. Using three separate drivers in each earpiece, the E500PTH offers stunning sound quality in the lightest and most comfortable design we've tested. The E500PTH package comes with an impressive list of accessories, which includes Shure's new Push-To-Hear Control module—a feature that lets you hear the outside world without having to remove the canalphones themselves ($499; www.shure.com).

Best Desktop or Compact Speaker System

We just couldn't pick a single desktop or compact speaker system this year. When it came to one-piece systems, JBL's **Radial** proved to be in a class of its own, thanks to its beautiful design and remarkably good sound quality—easily the best we've heard from a one-piece system. The Radial also includes a radio-frequency remote control that gives you the uncommon ability to navigate your iPod's menus from afar.

The second desktop or compact speaker system we like is Monitor Audio's three-piece **i-deck**. This product impressed us with its excellent detail, midrange, and stereo imaging and separation (Radial, ⬢⬢⬢⬢½; $349; www.jbl.com: i-deck, ⬢⬢⬢⬢½; $150; www.i-deckusa.com).

Best Home iPod Speaker System

If you were to take Klipsch's highly rated iFi stereo system, scale it down, change its color to white or black, and add an improved dock, you'd basically get the **Jamo i300**. Offering better detail and upper midrange than the 2005 Plays-of-the-Year-winning iFi, though sacrificing some volume and bass extension, the i300 is small enough to hide in most rooms while outperforming many of the stereos you'll find at the big chain electronics stores (⬢⬢⬢⬢½; $400; jamo.com).

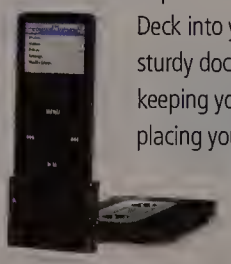
Best iPod Apparel

We've seen a good number of iPod-enabled jackets and clothing, but JanSport's **Power Jacket** and **Power Hoodie** are the best yet. Made of a water-resistant, soft outer shell with a fleece lining, both form-fitting-but-stretchy garments are perfect for active wear (the main difference between the two is that the Power Hoodie has a lined hood). Your iPod fits in an internal pocket near the jacket's waist and your headphones connect to a minijack near the jacket's neck. A soft-button pad on the chest lets you control playback and volume. The controls are easy to use—you don't have to reach inside or fiddle with touch-sensitive buttons. Both jackets are comfortable and attractive ($150 each; www.jansport.com).

Best Car Accessories

Need a way to keep your iPod from bouncing around your car's interior? Then consider Ten Technology's **flexibleDock**. Its base plugs into your car's power jack, which provides a stable mounting point and power for charging your iPod. A sturdy six-inch-long articulating arm hosts a thick dock-connector cradle that holds your iPod securely at a visible height. A stereo minijack on the base of the flexibleDock connects to your car's stereo via a standard audio cable or a cassette adapter, and two output levels provide compatibility with most car stereos.

If you have a first-generation iPod nano and a car with a cassette deck, you'll want to check out Belkin's **TuneDeck for iPod nano**. This unique accessory combines a cassette adapter and a car mount. You insert the TuneDeck into your stereo's cassette slot, and a sturdy docking cradle protrudes from the stereo, keeping your car free from cable clutter and placing your nano in a safe and convenient spot (flexibleDock, ⬢⬢⬢⬢½; $50; www.tentechnology.com: TuneDeck for iPod nano, $50; www.belkin.com).



iPODS

Product	Capacity	Rating	Price	Display	Battery Life	Media Supported	More Information
iPod	30GB	⬢⬢⬢⬢½	$249	2.5-inch color	14 hours of music playback; 4 hours of slide shows with music; 3.5 hours of video playback	Music, photos, album art, video, games	macworld.com/2233
iPod	80GB	⬢⬢⬢⬢½	$349	2.5-inch color	20 hours of music playback; 6 hours of slide shows with music; 6.5 hours of video playback	Music, photos, album art, video, games	macworld.com/2234
iPod nano	2GB	⬢⬢⬢⬢½	$149	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	macworld.com/2235
iPod nano	4GB	⬢⬢⬢⬢½	$199	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	macworld.com/2236
iPod nano	8GB	⬢⬢⬢⬢½	$249	1.5-inch color	24 hours of music playback; 5 hours of slide shows with music	Music, photos, album art	macworld.com/2237
iPod shuffle	1GB	⬢⬢⬢⬢	$79	N/A	12 hours of music playback	Music	macworld.com/2238

N/A = not applicable.

live

life

loud

small in size and big in sound, all iHome systems reinvent your iPod experience. compact yet sleek, powerful yet astonishingly clear, each iHome system features the crystalline sound of Reson8™ Speakers, a charging dock fit for all docking iPods (including nano), and an individualized design to suit your life-sound-style, at home or on the go.

iH5. clock radio companion with Wake to iPod/Sleep to iPod functionality. moonlights as clever home stereo. **iH31.** grab-n-go boombox. perfect for beach blasting or picnics in the park. sound good? visit ihomeaudio.com for more info.

iHome™

www.ihomeaudio.com

Made for iPod

Available at:

Apple Store Brookstone

OfficeMax RadioShack Tweeter

iHome, Live.Life.Loud, Reson8 are trademarks of SDI Technologies, Inc. iPod is a trademark of Apple Computer, Inc., registered in the U.S. and other countries. © 2006 SDI Technologies, Inc. All Rights Reserved.

MacGems

BY DAN FRAKES

GET MORE AND EXPANDED REVIEWS!

Go to www.macworld.com/macgems.

VIDEO CONVERTER

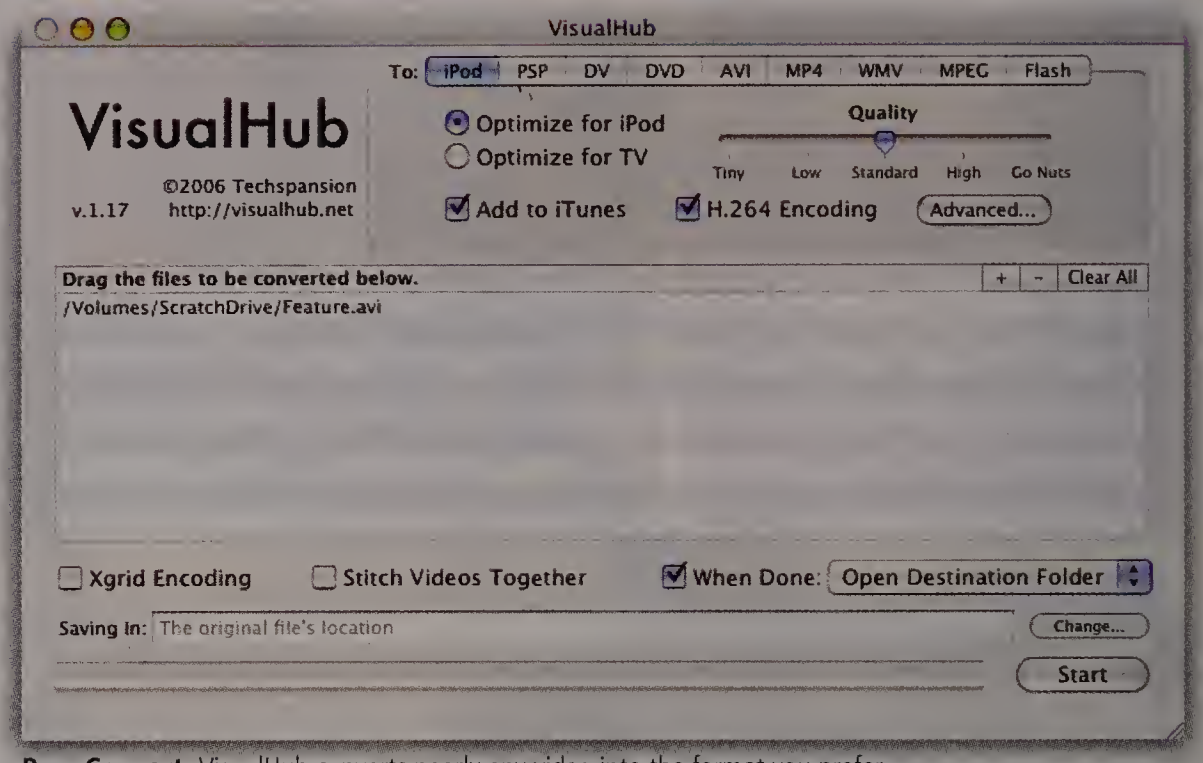
VisualHub 1.17

Computer-based video is everywhere these days. You can get it from your video or digital camera; you can use iMovie and other multimedia applications to create your own movies; and the Internet is overflowing with a veritable cornucopia of video clips. This is great news if you have a fifth-generation iPod, since you've got so many places to get content for your spiffy portable movie player.

The problem, as many iPod owners have discovered, is that much of that content won't play on the iPod. The device's software supports only a few video formats, mainly variants of H.264 and MPEG-4, while the world has decided that there should be myriad formats, none of which is universally compatible. Apple's iTunes and QuickTime Pro can both convert some files into iPod-compatible versions, but iTunes' support is quite limited, and QuickTime Pro costs $30.

If you're going to spend money for video conversion, consider Techspansion's VisualHub 1.17 (★★★★½; $23; macworld.com/2428), which offers support for a larger variety of video formats, including PSP and TV, as well as different resolutions. It's also easier to use for basic conversion, and offers more-advanced options, than either of Apple's programs.

VisualHub's interface for basic conversion is very simple. First you drag your source video—in nearly any format—into the main window; it will appear in the file list. Then you choose the device you intend to play the movie on; for example, you click on the iPod tab to select iPod conversion. Finally, you choose your conversion preferences. For the iPod, you can choose to optimize the video for playback on the iPod itself (320 by 240 pixels) or on a TV (640 by 480 pixels, a resolution that's not supported by many other video-conversion utilities for the iPod). You can also choose either standard MPEG-4 or higher-quality H.264 encoding, as well as set the overall Quality slider to anything from Tiny to Go Nuts. (Quality affects file size; for example, selecting Go Nuts creates files that are five times as large as files created at the Standard setting.)



Be a Convert VisualHub converts nearly any video into the format you prefer.

Click on Start, and VisualHub will do its thing, displaying its progress at the bottom of the window. Depending on the options you've chosen, VisualHub can also automatically add the resulting movie to iTunes so you can easily transfer it to your iPod.

Here's an example of VisualHub's performance: I had a 5.8GB, 1-hour-and-49-minute AVI movie file that I wanted to convert, using my Mac Pro, for iPod viewing. After processing the file for a long time, QuickTime Pro failed to convert it. (From past experience, I can tell you that it takes as long as an hour for QuickTime Pro to convert similarly sized MPEG video files for the iPod.) VisualHub, on the other hand, successfully converted the AVI file to an 87MB iPod-compatible MPEG movie, at the Standard quality setting, in less than eight minutes. Converting the same AVI file to H.264 format (which takes significantly longer in QuickTime Pro), at the High quality setting, took 22 minutes and 40 seconds and produced a 204MB video file.

If you drag multiple video files into the file list, VisualHub will automatically convert them all with one click. Another cool feature, Stitch Videos Together, automates the process of combining several video clips into a single video file. VisualHub will even combine MPEG-4 clips, something QuickTime Pro can't currently do. (Also, according to Techspansion, VisualHub won't rip commercial DVDs to an iPod-compatible format; however, I tried a couple of my own commercial DVDs, and VisualHub converted them just fine. Your mileage may vary.)

VisualHub doesn't just let you convert video for the iPod. It also converts video for playback on Sony's PlayStation Portable (PSP), as well as to the DV, DVD, AVI, MP4, WMV, and Flash file formats, and it has special settings for HD video, the Nintendo Wii, and TiVo Desktop. And the DVD mode lets you burn your converted video—up to 18 hours of it—to a DVD playable in standard DVD players.

VisualHub also offers a number of advanced settings. Clicking on the appropriately named Advanced button brings up a dialog box that lets you fine-tune each conversion type and format. For example, you can make the audio track of the resulting video quieter or louder, enable two-pass encoding for higher-quality video, crop the video to better fit different playback devices (or to remove the edge scan lines that can result from some tape-to-digital transfers), and add automatic chapters on converted video DVDs. You can also use VisualHub's Pre-

iMainGo™ for your iPod®

Small system.
HUGE SOUND!

"... the Walkman® of the 21st Century"

- *Blog Do iPod*, Brazil's largest iPod reviewer

Don't be fooled by the size. With its advanced digital electronics, iMainGo floods the room with music — clean highs, deep basses. With no earphones to tie you down.

Just unzip the iMainGo, plug in your iPod (any iPod fits), zip it up and stand back!

It's powerful. It's portable. It protects. It's the best friend your iPod ever had.

iMainGo...*do you?*™

For the dealer nearest you, visit imaingo.com

Portable Sound Laboratories, Inc.™

iPod® is a registered trademark of Apple Computer, Inc. iMainGo™ is a trademark of Portable Sound Laboratories, Inc. Patents pending

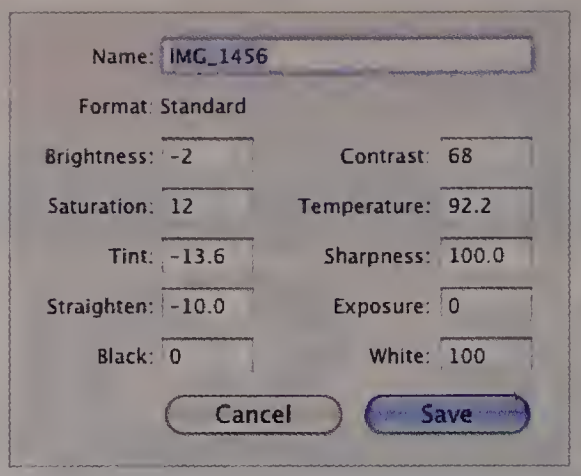
view panel to see how your compression choices will affect the quality of your video output.

I did experience a minor glitch with PSP postconversion options. VisualHub named the resulting files correctly for PSP playback, but it didn't place them in the proper folders on the PSP's memory card. And I received an AppleScript error when I tried to use the Preview feature in the advanced-settings screen. However, this error didn't affect the conversion process. VisualHub includes an excellent manual that explains each type of conversion and its respective settings. If you spend much time converting video files, VisualHub is a must-have.

BATCH PHOTO-EDITING PLUG-IN

iPhoto Batch Enhancer 2.0.3i

iPhoto's various photo effects—such as Enhance, Sepia, Fade Color, and Edge Blur, along with its handy Adjust palette—make it easy to tweak your photos to your liking. Unfortunately, if you have a bunch of images that need the same changes—for example, underwater photos or a group of pictures taken in the same poor lighting—you have to edit each image file individually. That is, you do unless you use feroXsoft's iPhoto Batch Enhancer 2.0.3i (♦♦♦½; payment requested; macworld.com/2429).



Group Photo For people who need to tweak multiple photos, iPhoto Batch Enhancer can make the task easier.

After installing iPhoto Batch Enhancer, you can apply iPhoto's standard effects, as well as the refinements found in iPhoto's Adjust palette, to multiple photos simultaneously.

To use iPhoto Batch Enhancer, go to the main iPhoto window and choose the photos you want to alter. Then switch to iPhoto Batch Enhancer and choose your enhancements. If you're simply applying one of iPhoto's stock effects, you select the First Effect option, choose the desired effect, and click on Apply; iPhoto Batch Enhancer then makes those changes. If you're using iPhoto 6 or later, you can also apply a second effect by selecting the Second Effect option and choosing another effect.

The process isn't fast. iPhoto Batch Enhancer uses AppleScript and Apple's UI Scripting technology (you'll need to make sure that the Universal Access preference pane's Enable Access For Assistive Devices option is selected), so your changes are made to each image as if you had manually applied them—iPhoto opens an image, switches to Edit view, applies the changes, exits Edit view, and then moves on to the next image. And you can't do other things on your Mac while these changes are being made; iPhoto must remain the frontmost application.

So iPhoto Batch Enhancer's benefit isn't that it saves you time—for example, applying the Black & White effect to three photos took 22 seconds on my Mac

MacMania™ 6
May 26th – June 2nd, 2007 • Alaska
www.GeekCruises.com/MacMania_03
Checkout testimonials, weblogs, photos, videos, past seminars, and Cap'n Neil Bauman's "take" at
www.GeekCruises.com/Experience
Mac Power User Track
• Apple's Latest and Greatest
• OS X Leopard Sneak Peek for the Power User
• Introduction to Automator
• A UNIX Guide to OS X
• Installing and Managing PostgreSQL on Mac
• FileMaker Pro Out of the Box
• FileMaker 7 Databases and the Web
• FileMaker and Automator
• Killer iLife Tips and Tricks for the Power User
CO-PRODUCED BY:
geekcruises.com®
EDUCATION THAT TAKES YOU PLACES
Macworld
THE MAC PRODUCT EXPERTS
CST# 2065380-40

Pro. Rather, it saves you effort and protects the health of your hands; you can start your batch enhancements before going to lunch or before going to bed at night, and they'll be done when you get back or wake up in the morning.

The other iPhoto Batch Enhancer option, Snapshot, lets users of iPhoto 5 or later apply changes made via iPhoto's Adjust palette—to the Brightness, Contrast, Saturation, Temperature, Tint, Sharpness, Straighten, Exposure, and Levels settings—to multiple photos simultaneously. However, because the Adjust palette contains multiple customizable settings, using this feature involves a few more steps than just applying an effect. First, you need to set iPhoto's Edit mode, via the iPhoto preference pane, to In Main Window. Then, still in iPhoto, choose a photo to be modified, bring up the Adjust palette, and choose your preferred settings. Finally, switch to iPhoto Batch Enhancer and click on the plus-sign (+) button to take a snapshot of those settings.

Now you can apply the settings captured by that snapshot to multiple photos, just as you apply effects: select the Snapshot option, choose the desired snapshot from the pop-up menu, and click on Apply. You can even save snapshots and import them into iPhoto Batch Enhancer on another computer.

Although it's fairly slow—and takes over your computer while it does its thing—iPhoto Batch Enhancer offers a handy way to work around a serious iPhoto limitation.

MAC MINI POWER-SUPPLY MOUNT

Power Grip Bracket

Although the Mac mini is a tiny computer, its power brick is surprisingly big—many users bemoan the fact that its bulky power supply takes up so much space next to the mini or on the floor beneath it. If you also feel this way, you'll want to check out Macessity's Power Grip Bracket (●●●½; $6; www.macessity.com). The Power Grip Bracket is, well, a *bracket* made of galvanized steel. You attach it to the bottom of your desk (it includes the necessary wood screws) and then slide your Mac mini's power brick into it. It holds the brick snugly, off the floor *and* off your desk. Even better, the Bracket includes two large metal tabs that you can wrap the mini's power cord around.

Power Lifter The Power Grip Bracket stores your Mac mini's power supply off the floor and out of the way.

For only $6, your mini's power supply is hidden away, and you end up with only as much power cord as you need. I have only two minor complaints: First, I wish the Bracket's cord-winding tabs were a bit longer; if your mini is very close to a power outlet, you might have a bit too much cord for the tabs to accommodate. Second, it would be nice to see some sort of notch or fastener for securing the cord so it wouldn't be able to unwind on its own. Even so, this is a unique accessory at a great price.

DAN FRAKES is a senior editor at *Macworld* and the senior reviews editor at Playlistmag.com. Send your thoughts on this column, or on things you'd like to see in future columns, to macgems@macworld.com.

Top Products

YOUR GUIDE TO THE BEST HARDWARE WE'VE TESTED

SEE MORE HARDWARE REVIEWS!
Go to www.macworld.com/reviews.

COLOR LASER PRINTERS

C6100dn ($1,102), from Oki Data (www.okidata.com):

The Oki C6100dn produces great-looking prints, and it includes built-in duplexing. It has easy network connectivity and quick printing speeds (macworld.com/1670).

ALSO RECOMMENDED:

Magicolor 2430 DL ($499), from Konica Minolta (www.konicaminolta.com):

At less than half the price of the Oki C6100dn, the Magicolor 2430 DL is network-ready and provides accurate color prints (macworld.com/0635).

INK-JET PHOTO PRINTERS

Stylus Photo R340 ($200), from Epson (www.epson.com):

The Epson Stylus Photo R340 prints the best color photos in its class, and it reproduces shadow detail extremely well. Its black-and-white prints are subpar, though (macworld.com/0948).

ALSO RECOMMENDED:

Pixma iP6600D ($200), from Canon (www.canon.com):

The Pixma iP6600D prints great-looking photos with or without your Mac (macworld.com/0950).

FIREWIRE DRIVES

DESKTOP DRIVES

G-Drive Q 500GB ($559), from G-Technology (www.g-technology.com):

The G-Drive Q SATA hard drive has nearly every type of connection you could want. The Q stands for *quad*—referring to the four different types of data connectors on the drive. You'll find two FireWire 800 ports along with a FireWire 400, a USB 2.0, and a high-speed eSATA port. It operates without a fan, so the G-Drive Q is very quiet—you hear only the occasional spin of the drive (macworld.com/1622).

ALSO RECOMMENDED:

d2 Hard Drive Extreme ($259), from LaCie (www.lacie.com):

With numerous connection options, a low price per gigabyte, and great performance, the LaCie d2 Extreme is a great value (macworld.com/1013).

PORTABLE DRIVE

Rocbit 2B ($230), from Rocsecure (www.rocsecure.com):

The Rocbit 2B, which has 40-bit encryption, is priced a bit higher than similar portable drives that lack encryption, but it's well worth the cost if security is a concern. In our tests, the Rocbit 2B was 6 to 31 percent faster than three comparable drives from other vendors (macworld.com/1443).

MACS

DESKTOP

Product	Processor	Display	Rating	More Information	Best Price[A]	Speedmark 4.5 Score[B]
iMac	Intel Core 2 Duo/1.83GHz	17 inches	★★★★	macworld.com/1727	$849	202
	Intel Core 2 Duo/2GHz	17 inches	★★★★½	macworld.com/1728	$1,049	232
	Intel Core 2 Duo/2.16GHz	20 inches	★★★★½	macworld.com/1729	$1,450	245
	Intel Core 2 Duo/2.16GHz	24 inches	★★★★½	macworld.com/1730	$1,699	245
Mac mini	Intel Core Duo/1.66GHz	not included	★★★★	macworld.com/1731	$555	152
	Intel Core Duo/1.83GHz	not included	★★★★	macworld.com/1732	$699	165
Mac Pro	Intel Xeon/ two dual-core 2.66GHz	not included	★★★★	macworld.com/2489	$2,298	299

PORTABLE

Product	Processor	Display	Rating	More Information	Best Price[A]	Speedmark 4.5 Score[B]
MacBook	Intel Core 2 Duo/1.83GHz	13 inches	★★★★½	macworld.com/2387	$1,042	168
	Intel Core 2 Duo/2GHz	13 inches	★★★★½	macworld.com/2388	$1,199	178
	Intel Core 2 Duo/2GHz (black)	13 inches	★★★★½	macworld.com/2389	$1,387	173
MacBook Pro	Intel Core 2 Duo/2.16GHz	15 inches	★★★★½	macworld.com/2340	$1,830	209
	Intel Core 2 Duo/2.33GHz	15 inches	★★★★½	macworld.com/2341	$2,265	226
	Intel Core 2 Duo/2.33GHz	17 inches	★★★★	macworld.com/2342	$2,500	211

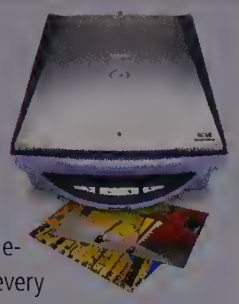
[A] From a PriceGrabber survey of retailers as of January 12, 2007. [B] Speedmark 4.5 is Macworld Lab's standard test tool for benchmarking systems running Mac OS X 10.4 (Tiger). For information on Speedmark testing, go to www.macworld.com/speedmark.

MINIDV CAMCORDER

PV-GS500 ($1,000), from Panasonic (www.panasonic.com):

The PV-GS500 is a fine piece of equipment: it offers great control, excellent video quality, and broad operational flexibility. Although the PV-GS500 is at the high end of the feature scale, it's moderately priced for what it offers, and it takes great-looking video and stills (macworld.com/1673).

FLATBED SCANNER



CanoScan 9950F ($399), from Canon (www.canon.com):

The CanoScan 9950F offers improved scan quality and more-intuitive software controls. This model tops its predecessor, the 9900F, in almost every way—resolution, color accuracy, transparency, scan quality, and software interface (macworld.com/0188).

LCD MONITORS

21-INCH DISPLAY

MultiSync 2190UXi ($1,500), from NEC (www.necdisplay.com):

This display doesn't come cheap, but graphics pros will love the NEC MultiSync 2190UXi's vivid and accurate colors and wide viewing angle. Its has a height-adjustable stand, so you won't need to stack ugly risers under the base of the monitor to raise it to your comfort level (macworld.com/1445).

20-INCH DISPLAY

MultiSync LCD2070NX ($799), from NEC (www.necdisplay.com):

The MultiSync LCD2070NX is great for people who want a moderately priced 20-inch monitor that can display bright, accurate colors. It sports digital and analog inputs, an integrated USB 2.0 hub, and a thin bezel (macworld.com/0636).

17-INCH DISPLAY

UltraSharp 1707FP ($279), from Dell (www.dell.com):

Budget-conscious display shoppers won't be disappointed by this highly flexible 17-inch monitor that has a built-in USB hub. Its display of text is very good, and its color is pleasing. It has an impressive range of motion: it pivots, tilts, and swivels. The only problem is its limited viewing angle (macworld.com/1259).

DIGITAL CAMERAS

8-MEGAPIXEL DIGITAL SLR

EOS Digital Rebel XT ($899; with lens, $999), from Canon (www.canon.com):

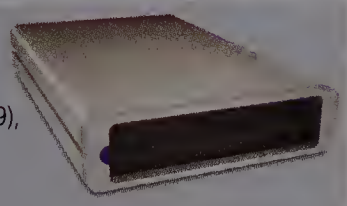
Canon defined this market with the original Digital Rebel, and the company keeps its lead with the EOS Digital Rebel XT. The Rebel XT is a very small camera—much smaller than the original Rebel. The XT's feature set, image quality, and price, combined with the vast assortment of available Canon mount lenses, make it the best choice in the sub-$1,000 digital SLR market (macworld.com/0535).

ADVANCED DIGITAL CAMERA

FinePix E900 ($410), from Fujifilm (www.fujifilm.com):

Digital camera resolution keeps increasing, and the Fujifilm FinePix E900 follows this trend as the first point-and-shoot camera we've seen with a 9-megapixel sensor. The FinePix E900 produces attractive images, with vivid, accurate colors and exposures, in a variety of lighting situations. It's no slouch in the features department either, with its long 4× optical zoom and Fujifilm's new Real Image Processor chip. This camera is a good choice for people who want the simplicity of a point-and-shoot camera and the ability to take control when necessary (macworld.com/1523).

DUAL-LAYER DVD BURNER



d2 DVD±RW with LightScribe ($189), from LaCie (www.lacie.com):

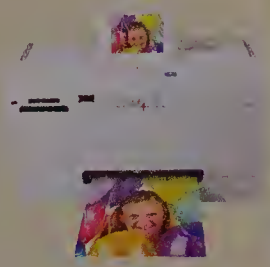
Whether you're looking to add DVD-burning capability to your system, looking for an easier way to copy optical discs, or just want the latest and fastest drives for burning DVDs—even dual-layer DVDs—the LaCie d2 can quickly and easily handle all of that and more (macworld.com/2263).

Top Products are those we've recently reviewed in a comparison of like products. As new products become available, we will update the list. For longer reviews of these products and for other product recommendations, go to macworld.com/reviews. All prices are as rated. For the best current prices, go to macworld.pricegrabber.com. All products were available as of December 28, 2006.

IN THE LAB

Hardware Products We Tested This Month

PORTABLE PHOTO PRINTER



P350 ($130), from Lexmark (www.lexmark.com):

The inexpensive P350 is Lexmark's first portable photo printer that works with a Mac and that uses water- and smudge-resistant pigment inks. Unfortunately, when compared with competing portable photo printers, the P350 came in last in terms of print quality and speed (macworld.com/1693).

PORTABLE PHOTO PRINTER

Pixma mini260 ($200), from Canon (www.canon.com):

This compact printer produces high-quality 4-by-6-inch snapshots quickly and quietly. It also includes a few perks, such as a color-balance mode, that could make it appealing to intermediate photographers (macworld.com/1694).

10.1-MEGAPIXEL DIGITAL SLR

EOS Digital Rebel XTi (body only, $799; with EF-S 18mm–55mm lens kit, $899), from Canon (www.canon.com):

An upgrade of Canon's EOS Digital Rebel XT, the XTi offers a 10.1-megapixel sensor, a 2.5-inch LCD screen, and a multitude of new features. This digital SLR is a full-featured camera that yields excellent image quality at a very reasonable price (macworld.com/1691).

6.1-MEGAPIXEL DIGITAL SLR

K100D (with 18mm–55mm lens, $699), from Pentax Imaging Company (www.pentax.com):

For people who want a digital SLR camera and all the flexibility that it provides, the K100D is a great entry-level camera at an unmatched price. The camera has features ideally suited to beginning shooters, but with lots of room to grow, which also makes it a good alternative for intermediate photographers. The K100D's controls are accessible and easy to understand (macworld.com/1692).

Cameras were tested in conjunction with the PC World Test Center.

Hello, iPho

What You Need to Know about Apple's Groundbreaking

Steve Jobs prefaced his introduction of the iPhone by saying, "This is a day I've been looking forward to for two and a half years." And it's safe to say that Mac users have been pining after such a product for at least as long.

Apple touts the iPhone as an iPod, a mobile phone, and an Internet-communications device all wrapped up in one. Perhaps it's not a huge surprise coming from a company that's taken a prominent consumer-electronics focus (with the iPod) and even dropped *Computer* from its name, but the iPhone is clearly big news.

We had our hands on this innovative device for a short while. Although Apple plans to share more details about the iPhone in the months preceding its release in June, here's our in-depth look at what we know about the iPhone's capabilities as a phone, an Internet-enabled device, and a wide-screen iPod.

BY DAN FRAKES AND JONATHAN SEFF

ILLUSTRATION BY JOE ZEFF

ne

New Gadget

The Phone

Like most of the Palm, Windows Mobile, and Symbian smart phones on the market, the iPhone has a touch-sensitive screen. But that's pretty much where the similarities end.

How is the iPhone different?

Instead of a small keyboard, which is standard on most smart phones, the iPhone has no keyboard at all. Instead of a bevy of buttons on the front for navigating and controlling features, the iPhone has just a Home button on its front and a few others on the sides—everything else is controlled via on-screen buttons and icons. Instead of a stylus, the iPhone requires that you use your finger. And instead of a scaled-down operating system to power it, the iPhone runs a version of OS X.

OS X? Which version?

It's a version of OS X that's been optimized for the iPhone hardware, but Apple's statements lead us to believe that the iPhone runs a mostly familiar version of OS X.

Tell me more about the iPhone's screen. Won't it scratch easily?

Indications from Apple are that the iPhone's display is more scratch-resistant than that of the iPods. The screen itself is a 3.5-inch, touch-sensitive display, which has a resolution of 320 by 480 pixels at 160 pixels per inch.

If there are no buttons, how do I make calls on the iPhone?

As Jobs said during his keynote, "What's the killer app [for the iPhone]? The killer app is making calls. It's amazing how hard it is to make calls on most phones." Having used various smart phones in the past, we can attest to that frustration.

Making a call on the iPhone starts with a click on the Home button, which takes you to the main window. A finger-press on the Phone application's icon activates the iPhone's calling features. This is possible thanks to Apple's patented multi-touch technology, which also lets you use your finger for fairly accurate typing that ignores unintended touches and certain multifinger gestures (more on that later). To make a call, you can type a number on the virtual keypad that appears at the bottom of the screen, or choose a number from your list of contacts, favorites, or recent calls. The iPhone lets you put a party on hold and merge calls for a conference call, with one touch of the screen.

What about ringtones?

Jobs demonstrated only one ringtone during his presentation, but the iPhone will ship with several of them. We don't yet know whether you can assign different rings to different people (as many other phones allow) or use your iTunes music as ringtones.

What other calling features will the iPhone sport?

We saw two on display during the keynote.

Voice Mail The iPhone takes a modern approach to voice mail. Instead of dialing in to a voice-mail system and listening to all your queued messages one by one, you use the iPhone's Visual Voicemail feature, which displays a list of current voice mails, including the names of who left them and the times they called. When you press one of the listed items, that message plays. You can also choose to save or delete voice mails, one at a time. The entire effect is not unlike an e-mail–client interface, but it's for voice mail.

Sensors A proximity sensor turns off the iPhone's display and the touch sensor when you bring the phone to your ear, to prevent accidental button activations. There's also an ambient-light sensor that adjusts the screen's brightness depending on the surroundings (think of the MacBook Pro's keyboard), and an accelerometer that senses when you turn the iPhone from one orientation (landscape or portrait) to the other.

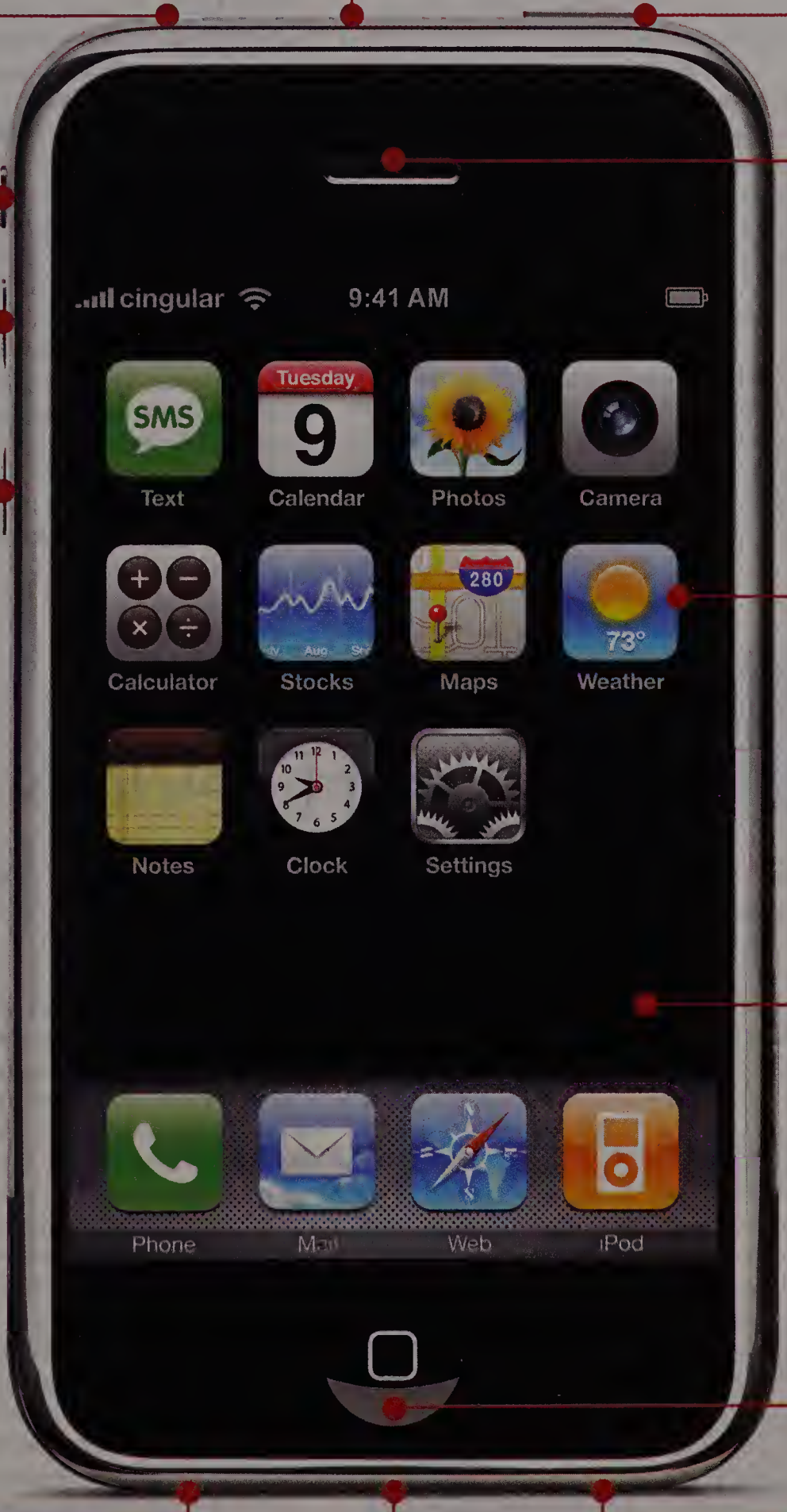
What are the iPhone's tech specs?

The 4.5-by-2.4-by-0.46-inch (115-by-61-by-11.6-millimeter) iPhone has no external antenna and weighs 4.8 ounces (135 grams). It will come in two versions: a 4GB, $499 model and an 8GB, $599 model. Those capacities are the iPhone's total storage for all applications, photos, music, and videos.

The iPhone, a quad-band GSM phone, works in the United States and in many other parts of the world. GSM—Global System for Mobile Communications—is the dominant standard in most of the world, but in the United States only AT&T (Cingular has merged with AT&T) and T-Mobile use it. For wireless data, it can work with e-mail and connect to the Internet, using AT&T's network or using the phone's built-in 802.11b and 802.11g Wi-Fi. The iPhone also includes Bluetooth 2.0+EDR capabilities.

iPhone: Behind the Hardware

Although the iPhone is still months away from release, Apple has shared a bunch of information about the surprising new gadget. Here's a rundown of the buttons, ports, and other pieces that make up the iPhone.



3.5mm headset-audio jack

SIM card slot

Sleep-wake switch

Speaker

Ring-silent switch

Volume buttons

Software buttons on touch-sensitive screen

320-by-480-pixel multi-touch display

Home button

Audio and speakerphone loudspeaker

30-pin iPod dock connector

Microphone

PHOTOGRAPH COURTESY OF APPLE

But the iPhone's wireless capabilities aren't clear yet—we don't know whether Bluetooth will work just for headsets or whether it or Wi-Fi will work for syncing data with a computer. One thing Apple did tell us is that you won't be able to use the iPhone as a wireless Bluetooth modem for a laptop (at least that's the current plan). Jobs also noted that Apple will release models with third-generation (3G) wireless-data capabilities in the future—3G networks are faster than AT&T's EDGE network.

Does that mean I have to use AT&T as my iPhone service provider?

Yes. Both iPhone models will require a two-year contract with AT&T, the exclusive U.S. carrier. Apple has no plans to release a version of the iPhone without a service contract or one that is unlocked. Both models will be available beginning in June, from Apple Stores and from AT&T.

There's just the one Home button on the iPhone's front. What other switches and features does the phone's case have?

On the front of the iPhone, just above the screen, is a small slit for a speaker—the one you'll hold to your ear when you're talking. The back of the iPhone sports a camera lens for its 2-megapixel digital camera. On one side are a pair of volume-control buttons and a switch that lets you toggle between an audible ring and silent operation (no word on whether the iPhone will vibrate). The top of the case has a 3.5mm headset and audio jack, a slot for the phone's SIM card (which identifies you to the cellular network), and a sleep-wake toggle switch. On the bottom, there's a loudspeaker (for audio playback and the speakerphone), a microphone, and a standard 30-pin iPod dock connector.

And for travelers, there's a selection in the iPhone's settings called Airplane Mode. Activating it turns off all the radios inside the iPhone (cellular, Bluetooth, and Wi-Fi), so you can safely use the iPod and PDA features during a flight.

What about accessories?

There may not be many at first, but near the end of his Macworld Expo presentation, Jobs mentioned two accessories that Apple plans to sell: stereo headphones with an integrated microphone, and a Bluetooth headset that pairs automatically with the iPhone and goes to sleep to preserve battery life. And without a doubt, we'll see other innovative iPhone add-ons—not just from Apple, but also from third-party developers.

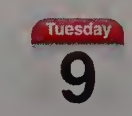
The Internet-Enabled Device

Steve Jobs made it clear that the iPhone belongs in the smart phone category, as a product that does much more than just make and take calls.

First, here are some of the iPhone's skills.

E-mail The iPhone tackles mail through its e-mail client, which supports rich HTML and inline images—it resembles OS X's Mail app. It works with POP3 and IMAP e-mail accounts, lets you choose a split-view display (with your inbox on top and selected message on the bottom), includes standard e-mail folders, and parses phone numbers in e-mail messages for quick dialing. In addition, Apple has partnered with Yahoo to provide free Blackberry-style *push* IMAP e-mail to all iPhone customers. Push e-mail automatically notifies you whenever you have new mail, without your having to check manually. Of course, you may need to switch to a Yahoo e-mail address to reap the benefits of that feature.

SMS Messaging The iPhone includes a full SMS text-messaging client that looks just like iChat. Unfortunately, the version of the software that Apple showed didn't let you connect to the AIM instant-messaging network; it worked only with SMS messages. Many cellular phone plans charge a premium for text messages, but it's unclear whether that will be true of the AT&T calling plans available to iPhone users.



PDA Another component of any smart phone is PDA functionality—storing and displaying your contacts, phone numbers, appointments, notes, and so on. The iPhone seems quite capable of tackling all this and more. There's an iCal-like Calendar app for appointments, as well as a Contacts section within the Phone application where you'll find contacts' phone numbers, addresses, and the like. So how do you get all your contacts and appointments onto the iPhone? Fear not—you won't have to input everything by hand (or, as the case may be, by finger). The iPhone will sync data, via the familiar iPod-syncing inter-

face within iTunes, with a Mac or PC. So presumably, the iPhone can sync with OS X's Address Book and iCal apps on the Mac, as well as contacts in Outlook Express and calendars and contacts in Outlook on Windows PCs. There's also a Notes application on the iPhone, but Jobs didn't say much about it, and it wasn't functioning on the iPhone we played with.

Widgets Miniature apps like Apple's Dashboard widgets seem like a great match for the iPhone. Jobs showed two that he said will be on the iPhone—Stocks and Weather. The Stocks widget can display multiple stock quotes and show percentage changes. The Weather widget can have multiple windows for different cities, and you move between them by "swiping" your finger across the screen. These widgets automatically connect to the Internet to update. There may be more widgets once the iPhone launches. And Apple (or third-party developers, if they're allowed) may offer additional widgets at some point.

Web Browser Unlike other smart phones, which run browsers that are anything but full-featured, the iPhone includes a version of Safari. Apple calls it "the first fully usable HTML browser on a phone." It can load standard Web pages (not scaled-down versions), complete with images. You can navigate a page by dragging your fingers to scroll. To zoom in or out on a section, you can either "pinch" (draw two fingers together or apart on screen) or tap twice on screen. You can even open multiple Web sites at once and move between them at will. Rotating the iPhone automatically switches its screen to landscape mode.

Google Maps Apple worked closely with Google on several aspects of the iPhone. The Safari browser includes a Google search bar (like the one in Safari 2.0), but the phone also includes a Google Maps application. With it, you can map out destinations, search for local businesses, save and access favorite locations, and view satellite imagery of mapped locations. (Google Maps isn't exclusive to the iPhone—for example, the company currently has a free app for Palm Treos, which provides similar functionality.)

All of this sounds like a lot of data entry. How do I type on a buttonless phone?

Use the on-screen keyboard. Both the e-mail and chat modes use this feature for text input. The keyboard doesn't offer tactile feedback, making error-free input more difficult than on a hardware keypad, but the iPhone features automatic error detection and text prediction—even if you do make a mistake, the software will often fix it before you notice. In our brief hands-on time with the iPhone, we found that single-finger typing actually worked quite well. (Although the iPhone doesn't offer tactile feedback for typing, it does offer *some* feedback—when you press a key, it enlarges, as if it's rising up to meet your finger.)

Tell me about the camera on the iPhone. What can I do with that?

The iPhone camera's 2-megapixel sensor is small by digital camera standards but impressive for a mobile phone. The camera uses the very large screen for image framing, and the phone's software includes a photo-management application that lets you browse your photo library or view individual photos in full-screen mode. This app takes advantage of the touch screen by letting you swipe left or right to cycle through images, or pinch them to zoom in or out (as with the version of Safari on the iPhone). There's no word on whether the iPhone will also be able to capture video.

How do third-party apps figure in to the iPhone?

The iPhone runs a version of OS X, but developers won't necessarily be able to modify their apps for the iPhone and release them on their own. In an interview with the *New York Times*, Jobs said that Apple will "define everything that is on the phone." As with the iPod's games, other companies will be able to create software for the iPhone, but Apple will be the gatekeeper (for example, for the Google and Yahoo software that the iPhone will include).

Our best guess is that third-party developers will be able to write software for the iPhone, but not with the freedom they currently enjoy when it comes to Mac development. Apple may allow more freedom for the installation of simple widgets, while tightly restricting the release of full-blown applications. We envision a model similar to those you see on gaming platforms, in which third-party developers can create software that the hardware manufacturer (in this case, Apple) controls and approves before it's released to the general public. In the end, we think that the iTunes Store will most likely be the only place where you can buy iPhone software.

Surf King The Safari browser on the iPhone lets you view complete Web pages, not the scaled-down versions that most cell phones display.

PHOTOGRAPH COURTESY OF APPLE

The iPod

As an iPod, the iPhone's functionality is similar to that of a fifth-generation model. In addition to being able to play the standard array of music file formats, the iPhone can display photos and play video. But there are several key differences between the two devices.

How is the iPhone different from the fifth-generation iPod?

For starters, notably absent from the iPhone is the iPod's famous Click Wheel; to navigate through your files and control playback, you use the iPhone's touch-sensitive screen. To find a particular song, for example, you press the Music item and then the Songs item. Then you move your finger up or down the screen to scroll the song list; a flick of your finger down the screen makes the scroll move more quickly. You can also press any letter of the alphabet from the list displayed on the side of the screen to jump directly to items beginning with that letter. (We had a hard time achieving accurate jumps because of the small size of the letters, but we did bypass a lot of scrolling.) Once you've found the song you're looking for, press the track's name to start playing it. Even with the different method of control, the menu- and file-browsing systems are recognizably iPod-like.

What is the screen like?

The iPhone is the first iPod to offer wide-screen viewing. (The built-in accelerometer recognizes when you rotate the iPhone and adjusts the on-screen image accordingly.) The screen measures 3.5 inches diagonally, with physical dimensions of 3 by 2 inches. That's not quite a cinematic 16:9 aspect ratio, but it's wider than the current iPod's. Press twice on the iPhone's screen to switch between a zoomed-in view, in which the video fills the screen, and a letterboxed view, with black bars at the top and the bottom.

Apple takes advantage of the iPhone's screen in other ways. For example, album art appears much larger than on current iPods. And when browsing music with the iPhone oriented horizontally, you can enjoy its Cover Flow mode—just as in iTunes 7. Drag your finger across the screen to flip through album covers and find music.

Double Wide As an iPod, the iPhone is the first model to feature a wide-screen, touch-sensitive display.

Will other iPods soon add that wide-screen capability?

We don't know. Although Apple uncharacteristically unveiled the iPhone many months in advance of its release, that doesn't mean the company is changing its long-standing policy of not revealing future product plans. That said, we're hoping to see the wide-screen design in the next iPod, perhaps with the cellular components replaced by a large hard drive but with Bluetooth for wireless headphones and Wi-Fi for direct-to-iPod purchases from the iTunes Store.

Does the iPhone have a hard drive?

No—like the iPod nano, the iPhone includes 4GB or 8GB of flash-based memory, which is much more compact than the 1.8-inch hard drives found in fifth-generation iPods. Although flash memory helps prolong battery life, the small storage capacity is an interesting limitation for a device with video-viewing capabilities. (Full-length movies easily top 1GB, so you shouldn't expect to carry too many on an iPhone.) There's also no slot for expanding the iPhone's internal memory with extra flash cards.

Are there any similarities between the iPod and the iPhone?

The iPhone uses the 30-pin dock-connector port present in iPods since the third generation, so many existing dock-connector–based iPod accessories may work with the iPhone right away. However, others will need a redesign. As a cellular phone, the iPhone broadcasts wireless signals. The iPod has never done this; therefore, some accessories will also need to include shielding so they don't pick up radio interference from the iPhone.

Hands (and Fingers) on the iPhone

Although the undisputed winner of the most-talked-about product award at this year's Macworld Expo was Apple's new iPhone, it was actually quite a rare commodity. There were two units behind plastic on the outskirts of the Apple booth, surrounded by throngs of worshippers and a phalanx of security guards. There was one onstage at the Apple booth, briefly shown off before being swept backstage to a high-security room. And there were some small number—maybe two, maybe more—being used in private briefing rooms by Apple executives.

I don't have an exact count, but as far as I can tell there aren't very many real iPhones out there in the world. (And since the iPhone is still months away from release, that's not too surprising.) It's also too bad. As big an impression as the iPhone has evidently made simply by dint of Steve Jobs's extended product demo and its coolness factor when slowly rotating in a clear cylinder, let me tell you from personal experience that the iPhone is much more impressive when it's in your hand—or rather, when your finger is running across its multi-touch screen.

It feels small and quite thin. The screen is remarkably responsive—I could sense no delay between my pressing an on-screen button and the phone's response to that finger-press. I typed on its on-screen keyboard with my index finger, and after about a minute, I felt that I was already well on my way to becoming a proficient iPhone typist. (The iPhone's software works very hard to figure out what you're trying to type, including taking note of what keys are near the one it thinks you pressed, in case your finger was just a bit off target.) And as you type, the keys "pop up," getting larger as if they're rising up to meet your touch, which gives you visual feedback that you're pressing the right letters.

The screen is impressively bright and remarkably crisp, thanks to a high pixel density of 160 pixels per inch (ppi). In contrast, the MacBook Pro has a pixel density of 110 ppi; the MacBook, 113 ppi; and the 23-inch Cinema Display, 98 ppi. The iPhone's screen is 320 by 480 pixels, meaning that the iPhone has twice as many pixels as the video iPod, but it fits them in an area that's 88 percent larger.

In any event, I can admit that I found it quite difficult to form complete sentences while I was holding the iPhone. In terms of sheer gadget magnetism, its power cannot be understated. One of the joys of using the iPhone is understanding that it's not just a press-and-hold interface, but rather one that you can control with numerous gestures, most of them fairly intuitive. When you're in a long list (such as a list of iTunes artists), flicking your finger on the screen makes the list scroll rapidly. To unlock the iPhone and start using it, you slide your finger across its face, a movement that made me feel as though I were unzipping the phone. Zooming in on an image or a Web page by poking at the area you'd like to enlarge with two fingers and then spreading them apart (Jobs called it "pinching") feels quite natural, too.

With five months between Expo and the iPhone's scheduled arrival date, it's clear that there's a lot more work for Apple's developers to do. We haven't seen all the software that will ship on the phone, nor do we really know details about how it'll let you browse important documents—for example, if someone e-mails me a PDF file, a Word document, or an Excel spreadsheet, will there be some way for me to display it? Apple officials assured me that the iPhone will support PDF, but they didn't offer any such assurances about other file formats. If the iPhone's not just a phone but also a revolutionary Internet-communications device, it'll need to be pretty versatile, and that means displaying (or editing) common document types.

Take it from someone who held one in his hand, if only for a moment.—JASON SNELL

Since the iPhone uses the same dock connector, we'd assume that you'd be able to charge it from a computer's USB port or via an AC adapter.

What kind of battery performance can I expect from the iPhone?

With so many great functions, it'll be easy to run down the battery without even noticing. Apple told us that the iPhone will contain one battery (which, as with the iPod, you can't access yourself) that should last up to five hours for talking, playing video, or browsing the Internet, and up to 16 hours for playing audio. (In comparison, the iPod nano is rated at up to 24 hours of audio playback, and the 80GB iPod can play up to six-and-a-half hours of video.) In any event, just exercise good judgment to ensure that you have enough juice left for your phone, especially after you listen to music, browse the Web, or watch a video.

The Last Word

In the coming months, Apple will parcel out additional bits of information about the iPhone, just to keep us salivating. But one thing is already clear: Apple has again done what it seems to do best—give an idea that exists in a flawed implementation the polish and attention to detail it deserves. □

DAN FRAKES is a *Macworld* senior editor and the reviews editor of Playlistmag.com. JONATHAN SEFF is *Macworld*'s senior news editor.

PHOTOGRAPHS COURTESY OF APPLE

Simple Strategies That Help You Get Organized and Stay That Way

Clear Away the Clutter

By Joe Kissell ILLUSTRATIONS BY HUAN TRAN

The more you use your Mac, the more stuff you accumulate. E-mail messages, downloaded files, personal photos, work documents, to-do items—they all have to go somewhere. Unless you have a good system for managing this stuff, you can quickly find yourself buried in clutter.

Clutter not only slows you down by making it harder to find the files you need. If left unchecked, clutter can also bog down your Mac's performance. The good news is that it's never too late to get organized.

It's hard to recommend one clutter-management system that will work for everyone. Some people rely on elaborate filing systems to instill order, while others think that filing is a waste of time and instead focus energy on improving their search skills. With that in mind, I've broken the clutter-control tips into two categories: one for the organizer, and the other for the searcher. In fact, you may be best served by a combination of these approaches.

Use these tips to generate your own ideas for dealing with files, notes, e-mail messages, and other data as they arrive on your Mac—and *before* they turn into clutter. (To share your own organization strategies, go to macworld.com/2486.)

Finesse Your Files

The first step in reducing clutter is to devise a system for managing the files you create and download. How extensive this system needs to be will depend on your organizational strategy. Some people prefer to set aside specific places for everything in an elaborate system of nested folders, while others create broader filing systems and rely instead on search tools to locate what they want. Whichever approach you take, consider the following tips.

THE ORGANIZER'S STRATEGY

Go Deep, Use Shortcuts

If you're the type of person who likes to have an assigned place for everything, you've probably already developed a system for filing your documents and media files. (If you're in search of an organization system, see "The Secret to Getting Things Done" for an alternative to traditional filing systems.) With a well-conceived filing system in place, you won't have to spend time searching for the files you need; you'll be able to jump right to the correct folder.

No matter how you set up your system, don't let any folder get too crowded. Just as with physical file folders, the more items one contains, the harder it is to find something inside. Instead, create a system of subfolders to keep things manageable. If you find that you're spending too much time clicking through multiple levels to get to the folders you work with regularly, there are a few ways to bring your folders within easier reach.

Take a Shortcut Drag folders for active projects to the left sidebar of any Finder window (if you don't see the sidebar, drag the left edge of the Finder window to the right). This adds folder aliases to the sidebar. You'll then be able to access these folders not only from any Finder window, but also from Open and Save dialog boxes. When you wrap up a project, simply remove the folder's alias by dragging it out of the sidebar.

If you need quick access to more items than comfortably fit in the sidebar (or if you prefer to keep the sidebar hidden), you can place aliases of active folders on your desktop instead. Of course, for this system to work, you'll need to keep your desktop relatively tidy (for help clearing away desktop clutter, see "Rediscover Your Desktop").

Use Color In OS X 10.4, another easy way to keep track of current projects without having to constantly drill through your folder system is to use color labels in conjunction with smart folders. As documents come in, you can categorize them with appropriate label colors (for instance, files that need your revisions could get one color while files that just need your approval get another). Just select an item and choose File: Color Label. (To give each label color a descriptive name, choose Finder: Preferences and then click on the Labels tab.)

Now you can create a smart folder that dynamically collects any files marked with a certain color, regardless of where they live in your folder hierarchy. To set up the smart folder, go to the Finder and choose File: New Smart Folder. Set the first pull-down menu to Color Label and select the label color. Click on the Save button and give your smart folder a name. Be sure the Add To Sidebar option is selected so you can easily access your smart folder from any Finder window, and then click on Save. When a file is completed or when its status changes, change the file's label color (or remove it completely), and the file will disappear from that smart folder. (For more advice on creating smart folders, go to macworld.com/2452.)

Keep It Current Once a year—or more often if you work with a lot of files—move

TIP

CARVE OUT YOUR OWN SPACE Apple recommends storing personal files in your user folder's Documents folder. Unfortunately, some programs place their own folders in there—including Microsoft programs, Quicken, and iChat—making it harder to pick out your files. One way around the problem is to create a new folder within Documents for just your stuff. To make this folder easy to spot, place a space at the beginning of the folder's name; this will force the folder to the top of the list when you look at Finder windows in List view. A more radical approach is to abandon your Documents folder entirely. Create a new folder at the top level of your user folder and place your files and folders inside. Either way, add the new folder to the Finder sidebar so it's always within easy reach.—ROB GRIFFITHS

"I keep only two folders [on my] desktop: my Downloads folder and a folder called Misc where I put anything that's been on my desktop for more than a day or two."

—JOHN GRUBER, MAC DEVELOPER AND DARING FIREBALL BLOGGER

older files from each of your top-level folders into an archive folder, so you can more easily see recent documents.

To quickly locate older files, switch the Finder window to List view (⌘-2), click on the Date Modified column to sort by date, and then move all the files from the past month or year into a new folder.

TAME YOUR TRASH One of the best ways to reduce clutter is to drag unneeded files to the Trash. However, once you empty the Trash, you won't be able to recover those files if you later discover that you need them (at least not without considerable effort). For this reason, some Mac experts recommend emptying your Trash only when you're running low on disk space. But if the sight of an overflowing Trash makes you cringe, try this compromise: create a Pre-Trash folder in which you can store files that you *think* (but are not completely sure) you no longer need. This helps protect you from imprudent erasures, so you can drag files off your desktop more freely. Every so often, sort the files by date and dump older items into the Trash.

THE SEARCHER'S STRATEGY

Use Fewer Folders, Smarter Searches

If you prefer a less-structured approach to managing your files, or if you find that you're having trouble locating the files you need within your current file structure, you may get better results by channeling your energy into developing smart search strategies than by setting up an elaborate folder structure.

When Apple introduced Spotlight, OS X 10.4's built-in search feature, it seemed that filing might become a thing of the past. But the program still has some kinks—most notably, slow performance and a lack of advanced features, such as convenient Boolean searches. Until these shortcomings are fixed (OS X 10.5 should be released this spring, and Apple has promised several Spotlight improvements), you'll need to either take some additional steps to improve your search results or rely on a third-party search program.

Use Keywords in File Names When you save a file, take a moment to think about what words you might use to search for that file later, and then be sure to use those keywords in the file's name. For example, a file named Steve Jobs Interview will be easier to track down than a file named Interview2. This rule also applies to creating folder names; use a different set of keywords that add context to the files within. This will help you distinguish between similarly named files on your Mac when you search.

Add Metadata to Your Files Another way to help Spotlight track down a file is to add keywords directly to the file's metadata, using the Spotlight Comments pane. To access this pane, click on the file in the Finder and press ⌘-I to bring up its Info window. Click on the small triangle next to the Spotlight Comments header to open the pane (if it isn't already visible), and then enter keywords related to the file. For example, if you have a lot of recipes, you might add keywords such as *spicy*, *appetizer*, and *favorite*. Later, you can use these terms in a Spotlight search to find spicy appetizers that you liked. (For instructions on how to use Automator to add the same comment to a large number of files at once, see *Mac OS X Hints*, page 84.)

Likewise, if most of your documents originate in Microsoft Word, you can set the program to prompt you for keywords every time you save a new file. These key-

REDISCOVER YOUR DESKTOP

Far too often, the OS X desktop becomes an all-purpose dumping ground for random downloads, files, and anything else we don't know what to do with. But when you have dozens or even hundreds of icons there, locating just what you're looking for becomes a challenge. To make matters worse, OS X allocates memory for each desktop icon as though it were a window, so having a lot of stuff on your desktop increases your Mac's RAM usage.

If you keep your desktop relatively free of clutter, you can use it to keep track of files that need to be dealt with or to hold shortcuts to important files or folders. (If you seldom actually see your desktop behind all your open documents and other windows, take advantage of Exposé: pressing the F11 key moves all open windows out of the way and reveals the desktop.)

Use these strategies to combat the common causes of desktop clutter:

Create a Folder for Downloads

If your Web browser downloads files directly to your desktop, change your default download destination to a folder. First create a new folder named Downloads on your desktop. If you use Safari, choose Safari: Preferences, click on General, and choose Other from the Save Downloaded Files To pop-up menu; then select your new Downloads folder and click on Select. If you use Firefox 2, choose Firefox: Preferences and click on Main; then click on the Choose button next to the Save Files To heading, and select your Downloads folder.

Designate a Place for Junk

The desktop can also end up as the storage place for files we don't know what to do with. Instead of storing these miscellaneous files on the desktop itself, create a special folder for these items and put that folder (or an alias to the folder) on the desktop. Once a week, move unclassifiable stuff off the desktop and into this folder. Your files will still be handy, but you'll have less visual clutter.

To keep track of files that have been hanging around for a while, consider keeping files on your desktop arranged by date. Click on the desktop, and then choose View: Show View Options. Select the Keep Arranged By option, and choose Date Modified from the pop-up menu.

Wipe It Clean

You can also turn off the display of icons for your hard disks, iDisk, and network volumes by opening your Finder's General preference pane and deselecting the first three items. Don't worry—you can still access these items from the sidebar of any Finder window or through the Finder's Go menu.

THE SECRET TO GETTING THINGS DONE

For a different way of thinking about organization, try the Getting Things Done (GTD) approach, developed by David Allen. GTD advocates collecting all the *stuff* that's demanding your time, energy, and attention—e-mail messages, requests from bosses and coworkers, random things that pop into your head, and so on—and strictly organizing them into separate categories: things that you can act on right away and things that you can deal with later.

For things that you can't accomplish in just a couple of minutes, GTD recommends creating different to-do lists. But while many of us sort our to-do lists by priority or project, GTD says you should organize them by *context:* maintain one list for things that you need to do when you're online, another for phone calls, another for items that involve driving somewhere, and so on. The idea is that if you feel confident that your tasks will come to your attention when and where you can take care of them, you'll spend less mental energy keeping track of everything and more on getting it done.

You can learn more about GTD at the GTD Web site (macworld.com/2451). To interact with other GTD fans or to learn how others are trying to put the GTD philosophy to work, check out the Lifehack blog (www.lifehack.org), or 43 Folders (www.43folders.com), a blog and community forum devoted to GTD tips.

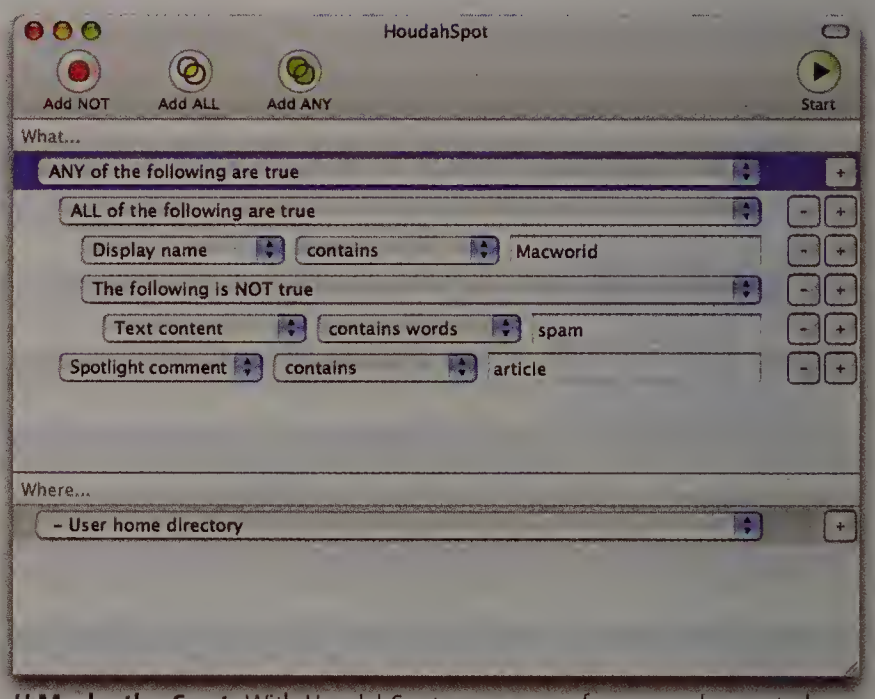
words won't appear in the Spotlight Comments pane; however, Spotlight will find them when performing a search.

To set up this feature, choose Word: Preferences and select Save from the left column. Select the Prompt For Document Properties option, and click on OK. Now when you save a document for the first time or select the Save As command, the Properties dialog box will appear and give you the option of entering keywords. To revise these keywords later, or to add new keywords, open the Word document and choose File: Properties.

Improve Spotlight When searching, Spotlight tends to be a little overeager; it starts hunting before you've even finished typing. If this annoys you, you may prefer Houdah Software's HoudahSpot ($15; www.houdah.com), which offers an alternative interface for Spotlight queries (see "*H* Marks the Spot"). HoudahSpot also offers quick access to powerful search features, such as complex, nested Boolean searches, and it has a convenient interface for previewing found files and examining additional file details. And unlike the systemwide Spotlight menu, it doesn't start searching until you tell it to.

Replace Spotlight If you'd like to avoid using Spotlight completely—or if you're using an earlier version of OS X that does not include Spotlight—try CTM Development's Foxtrot Personal Search ($35; www.foxtrot.ch). Like Spotlight, Foxtrot indexes files' contents and metadata; however, it does so with greater speed and flexibility than Spotlight can provide. Foxtrot produces not only a list of files that contain your search terms, but also live previews showing the locations of your search terms within the files. You can also narrow searches by date, file type, location, and relevance simultaneously. For example, if a search for files containing *Macworld* produces a list of 1,000 matches, I can narrow that search to just PDF files modified within the last month—in exactly two clicks of the mouse.

If you usually know the name (or even just a part of the name) of the file you want, you don't really need a powerful search tool—just a speedy one. For tasks such as this, you'll get better results from a launcher utility. These programs let you jump right to the file or application you want with just a few keystrokes. With a launcher, such as Blacktree's free Quicksilver (★★★★½; macworld.com/1247), Peter Maurer's free Butler (★★★★★; macworld.com/1246), or Objective Development's $20 LaunchBar (★★★★★; macworld.com/1010), you can stash random files—PDF receipts of online purchases, text files, and so on—wherever you like. When you need to find one of those files, simply press a keyboard shortcut to bring up the launcher, and type in the first few letters of the file's name. Best of all, a good launcher will do more than just open a file. It will also let you copy it, move it, put it in the Trash, or reveal it in the Finder (for more on how a launcher can make you much more productive, see macworld.com/2453).



***H* Marks the Spot** With HoudahSpot, you can perform complex nested Boolean searches. This example shows a search for any file that either has *Macworld* in its name but lacks the word *spam* in its content, or has the word *article* in its Spotlight comments field.

"Set up a system and follow it. . . . Even if it's not a great system, there is still some logic to it. And a bad system can always be refined and improved upon."

—JEFF LEHMAN, PROFESSIONAL ORGANIZER

Wrangle Your Snippets

In addition to organizing our files, most of us have to keep track of innumerable small pieces of information. Some of them, such as to-do items, fit well in a calendar program. Others, such as notes to yourself, shopping lists, serial numbers, seldom-used Terminal commands, and clippings from Web pages, pose more of a challenge.

There's no shortage of ways to cope with all these random snippets of data. Some are decidedly low-tech—say, a jumble of sticky notes along the edge of your monitor. However, one of the most efficient options is to invest in a snippet keeper, software designed for storing and organizing miscellaneous scraps of data.

There are a number of snippet keepers available for the Mac. But as with any organization effort, you'll have greater success if you choose a program that mirrors the way you prefer to work. You'll not only find the process more intuitive but you'll also be less likely to give up after your initial enthusiasm wears off.

No matter which system you use, keep everything—or at least everything of a given type (notes, text clippings, to-dos, and so on)—in a single place. A basic text file, or even a paper notebook, is better than lots of separate files, Stickies notes, or scraps of paper—which will merely leave you with more clutter to manage.

THE ORGANIZER'S STRATEGY

NoteBook

Circus Ponies' $50 NoteBook (●●●●½; macworld.com/2454) can store a wide variety of data, including graphics. NoteBook uses a notebook metaphor (hence the name) to help you organize your data in different categories. This should make it appealing to people who prefer to impose their own structure on the information they store, who rely heavily on outlines, or who are accustomed to keeping a paper notebook and are looking for a good digital equivalent. NoteBook also includes a capable outliner (so it's especially good for lists) and integrates well with Apple software such as Mail, Address Book, iCal, and iChat.

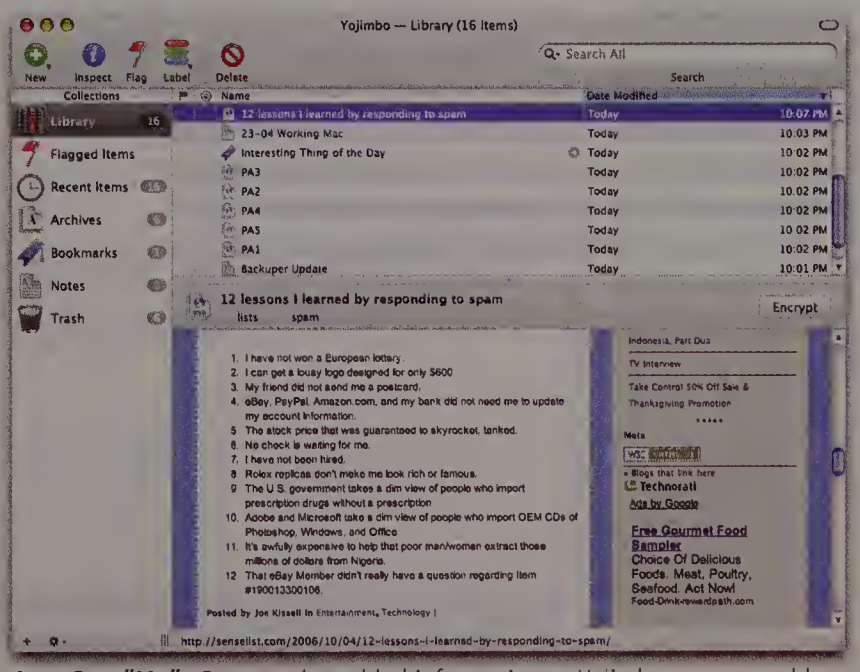
THE SEARCHER'S STRATEGY

Yojimbo

Bare Bones Software's $39 Yojimbo (●●●●; macworld.com/1186) lets you store nearly any kind of data, from plain text to photographs, PDF files, and Web pages (see "Just Say 'Yo'"). It even offers encryption for sensitive data such as passwords. You copy and paste or drag information into Yojimbo, or you can create your own keyboard shortcuts.

Although you can organize snippets in groups (called Collections) in Yojimbo, there isn't any hierarchical organization; instead, the built-in Spotlight searching rapidly takes you to the information you're looking for. To make searches more productive, the program lets you create tags that categorize your information. This makes Yojimbo particularly useful if you prefer to keep all your files in just a few folders and all your e-mail in your inbox.

The key to using Yojimbo effectively is to automatically put every interesting or essential piece of information there as soon as you encounter it. As Yojimbo's store of snippets grows, you'll get used to looking there first.



Just Say "Yo" Once you've added information to Yojimbo, you can add tags to help you identify it, and search for snippets easily using Spotlight.

THE GTD WAY

Are you a fan of David Allen's Getting Things Done (GTD) organization methods? Check out one of the many snippet keepers that emphasize the GTD model:

Tracks This free Web-based implementation of GTD lets you quickly sort tasks and notes according to their context (so you have a handy to-do list ready when you want to focus on errands or on office tasks, for instance). If you apply a due date to an action, its color will change to reflect how much time you have left (www.rousette.org.uk/projects).

Kinkless GTD If you use The Omni Group's $70 OmniOutliner Pro (●●●●●; macworld.com/0612) to manage your snippets, Kinkless GTD, a free set of Apple Scripts, is a way to turn the app into a full-featured GTD-style task manager (www.kinkless.com).

Midnight Inbox This $35 program by Midnight Beep steps you through the process of putting the GTD system to work. The program collects incoming e-mails, documents, and to-do items and helps you process those items (www.midnightbeep.com).

Stem E-mail Overload

For most of us, e-mail has become a primary means of communication—which means that we have an ever-expanding list of messages to read and process. To keep from being overwhelmed, first figure out how to keep your inbox under control, and then decide on other details of e-mail organization. As with organizing your files, choosing strategies to implement will depend on whether you prefer to find a place for each message or to rely primarily on searches to sift through your mail.

THE ORGANIZER'S STRATEGY

Act Quickly, File Everything

If you hope to apply order to your rapidly growing collection of e-mail, you have to be willing to act decisively, dealing with messages as swiftly and efficiently as you can and then filing them away in discrete mailboxes. By choosing a place for each message that you receive, you can build groupings that add context to your messages—categorizing them by project or by your relationship to the sender. Later, when you need to find a particular message again, you'll know just where to look.

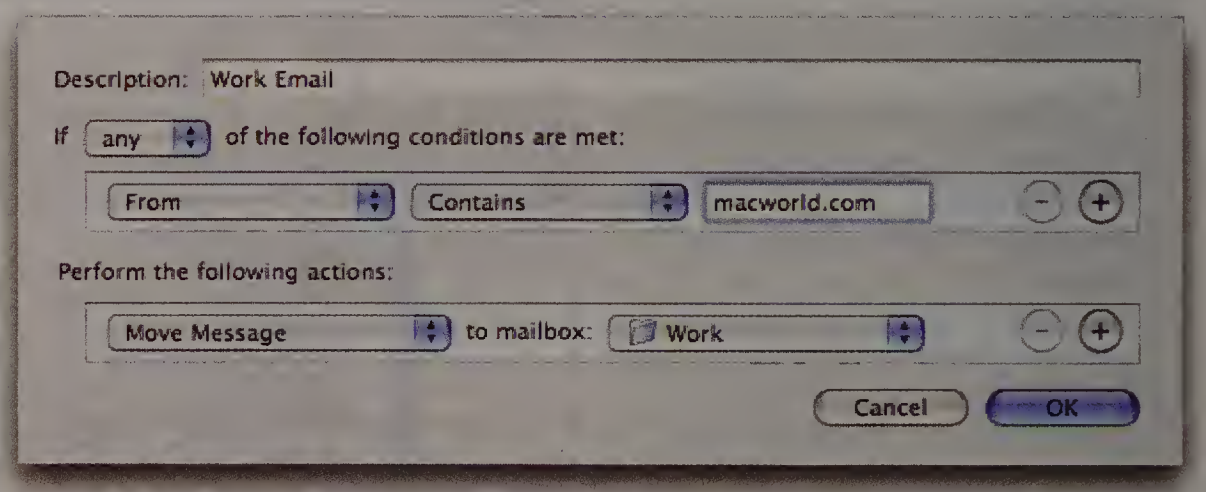
If you feel overwhelmed by the rising flood of messages in your inbox, these tips should help:

Empty Your Inbox Keeping your inbox under control requires vigilance. If you allow messages to pile up for too long, you'll have a much harder time dealing with them. You may also have greater difficulty remembering which messages still require your attention. To address this problem, I recommend treating your e-mail inbox like a physical inbox on your desk—that is, a place that holds things you haven't looked at yet. Try to deal with messages as you read them. Once you've read, replied to, or otherwise acted on a message, immediately file it in an appropriate mailbox. My inbox, for example, seldom has more than half a dozen messages in it at any given time.

As with managing files, deciding how to set up your filing system is largely a matter of personal preference. However, if you choose to divide your mail between many very specific mailboxes, you may find it helpful to group similar mailboxes in nested folders, which you can then hide or reveal as needed. For example, you might have a Work mailbox that contains a separate mailbox for each work project.

If you're having trouble making decisions about where to put individual messages, consider setting up a system of mailboxes based on actions that need to be taken, rather than categorizing messages according to their content (see "The Three-Mailbox System").

Automate Your Filing People who receive hundreds of messages a day often rely on their e-mail software's rules (or filters) to help them process their messages more quickly. Rules scan incoming messages for specific criteria, such as a particular sender or text in the subject



Mail Room Mail, like most e-mail programs, offers rules you can use to sort incoming messages. In this example, all messages from the macworld.com domain get filed into a Work mailbox, to keep them separate from spam and personal mail.

BEEF UP MAIL

If you like using Apple Mail but feel limited by its search and sorting features, two add-ons from indev (www.indev.ca) will give you some needed power:

MailTags This $25 utility enhances Spotlight searches by letting you apply keywords and categories to both incoming and outgoing messages. For example, you can tag all messages pertaining to your dissertation with the keyword *dissertation*. Later, if you perform a search in Spotlight, it'll find all messages tagged as being relevant to your dissertation, even if some of the messages don't include that word in the subject line or message content (♦♦♦♦; macworld.com/2457).

Mail Act-On This free plug-in lets you apply specific rules to selected messages, using keyboard shortcuts. Ordinarily, all rules apply sequentially to all incoming messages. But with Mail Act-On, you can create special rules that apply only when you invoke them. For example, you could create a key sequence that means "file this message in my Friends mailbox" or "send this canned reply to this person" (♦♦♦♦; macworld.com/1275).

line. When a rule finds a message that matches a criterion, it takes action, typically moving the message into a designated mailbox.

To set up a new rule in Apple's Mail, choose Mail: Preferences and click on Rules; in Microsoft's Entourage, choose Tools: Rules. You can use rules to filter out spam that your junk-mail filter doesn't catch—for example, deleting messages with the words *discount software* in their subject lines—or to move all messages from your coworkers into your Work mailbox (see "Mail Room"). To set up the latter rule in Mail, set the first condition to From Contains, and then enter the domain name that appears at the end of your company's e-mail addresses (after the @ symbol).

When creating multiple rules, keep in mind that your e-mail program applies rules in order. So if it isn't filing messages in the way you expect, one rule may be interfering with another that is applied after it.

Mark Messages for Follow-Up Some messages, of course, you can't dispose of immediately. Perhaps you can't reply to the sender until you've finished a project or done some research, for example. If such messages are starting to clutter up your inbox, create a mailbox that's specifically designated for things that need follow-up. This gets these messages out of your inbox but keeps them within easy reach. Just make sure that you check this mailbox frequently.

Most e-mail programs let you keep track of messages that still need attention, by flagging them. To do this in Mail, select the message and choose Message: Mark: As Flagged. In Entourage, choose Message: Flag For Follow Up. Once the message is flagged, you can file it in an appropriate mailbox.

To keep track of your flagged messages in Mail regardless of where they're filed, create a new smart mailbox (choose Mailbox: New Smart Mailbox) and set the first condition to Message Is Flagged. Give the smart mailbox a name and then click on OK.

Entourage offers a built-in custom view called Flagged, which displays all flagged messages; to see them quickly, simply click on Flagged in the Mail Views section of the Entourage folder list. This lets you get messages out of your inbox without allowing you to forget that they still need a response. You can also set up your own custom view. First, perform a search by choosing Edit: Advanced Find, fill in one or more criteria, and then click on Find. When the search results appear, choose File: Save As Custom View and give the view a name.

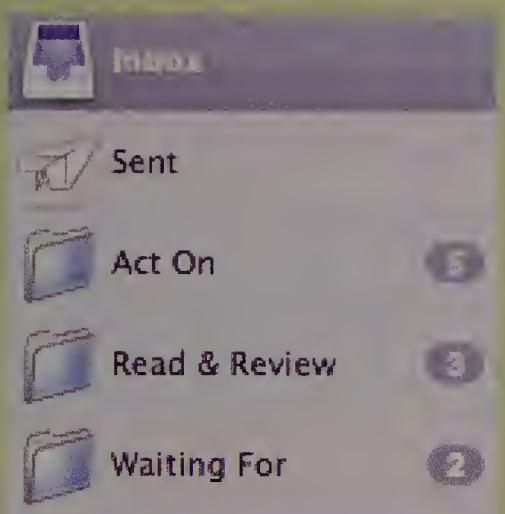
Limit Your Search If you're having trouble finding an old message, try searching one mailbox at a time. The results are usually much faster than searching all your mailboxes at once.

THE SEARCHER'S STRATEGY

Keep Everything in One Place

If the presence of messages in your inbox makes you feel untidy, filing them away will help keep them out of your sight. But if you're overwhelmed by the idea of trying to find a home for each and every message you receive, you may find it more convenient to skip the filing system and instead use your inbox (or another catchall mailbox) as a general storage bin. By keeping everything in one mailbox, you'll avoid the hassle of switching between mailboxes. This strategy may also make it easier to keep track of messages that are difficult to categorize or that fall into several different categories.

If you choose not to file your messages (or to use only a few mailboxes), you'll rely more heavily on your e-mail client's search features. However, if you use Mail with an IMAP account, this is probably not the best strategy for you. The pro-



THE THREE-MAILBOX SYSTEM

If you're struggling to find a useful way of categorizing your e-mail—particularly e-mail that still requires your attention—consider taking a page from the Getting Things Done system (see "The Secret to Getting Things Done"). Rather than filing messages according to subject matter or sender, file them according to when you need to act on them.

To set up this system, create three mailboxes (one for each type of message that demands your attention). Start with an Act On mailbox to hold messages that require action but that you can't process right away. Next, create a Waiting For mailbox for messages that you can't act on until someone provides you with additional information. And finally, create a Read & Review mailbox for lower-priority messages that you'll look at when you have time.

Respond to messages immediately if you can. If you can't, file them in the appropriate mailbox. Whenever you have some spare time, open the Act On mailbox and deal with as many messages as time permits.

"Deal immediately with what you can (either getting rid of it or putting it in some logical place); don't let the other things stick around unprocessed too long. For those that do stick around, occasionally take a chunk of time out to process them."

—CAROLINE ROSE, TECHNICAL WRITER AND EDITOR

ADVANCED MAIL SEARCHES

To help narrow down search results in Mail, use these handy Boolean expressions (you must choose the Entire Message option for these to work).

TO SEARCH FOR E-MAILS MENTIONING	TYPE
Apples AND Oranges	Apples & Oranges
Apples OR Oranges	Apples | Oranges
Apples but NOT Oranges	Apples ! Oranges
Apples AND either Oranges OR Lemons	Apples & (Oranges | Lemons)

WHEN IN DOUBT, KEEP IT You should feel free to delete spam and any ephemeral messages, such as the announcement of a new product line at your local kitchenware store, as they come in. But don't be overzealous about tossing old mail. With today's generous hard drives, there's little point in deleting legitimate correspondence. Instead, tuck it away where it won't be in your way, but where you can easily find it if you need to. You never know when you'll suddenly need to remember the name of the bass player your cousin was dating last year.

gram often runs into serious performance problems when there are more than 1,000 messages in its IMAP inbox.

When you use your inbox (or any mailbox) as a general storage bin for a massive quantity of mail, quickly singling out a particular message from the crowd becomes much more challenging. These tips will help:

Use Color Coding If you keep all your messages in your inbox, color-coding them will make it easier to find the ones you're looking for. For example, you might use one color for coworkers and another for family and friends.

If you use Entourage, setting up a color system is relatively easy. First, set up your color scheme by choosing Edit: Categories: Edit Categories. Click on Add Category, enter a description, and then select a color to represent that category. As you add contacts to Entourage's address book (choose Tools: Add To Address Book), quickly assign each one a category by selecting Edit: Categories. Now every message you receive from this person will appear in the color you selected (see "Color My World").

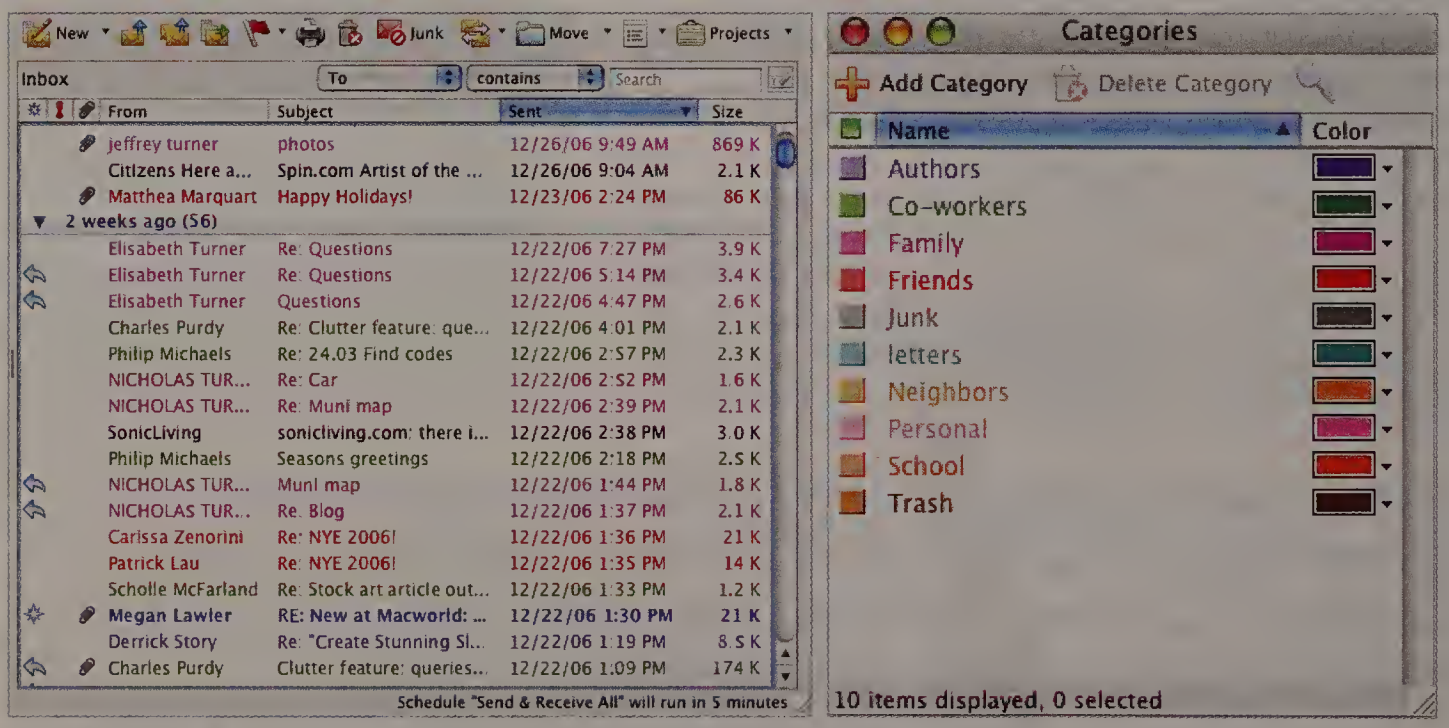
Search Smart Every e-mail client offers search features that can help you quickly locate one message in a list of thousands. In Entourage, for example, you can perform a quick search by entering text in the search field at the top of the window and then using the pop-up menu to restrict the search to the subject line, sender, recipient, category, or project. To quickly see just your unread messages, choose View: Unread Only.

However, all of these strategies rely on a single search term. In Entourage, to perform more-complex searches using multiple criteria—such as message content, date received, and attachment names—press ⌘-option-F. In the Find window, you can also specify whether to search just the current mail folder or all folders.

Mail, on the other hand, relies on a Spotlight search field to perform searches. Type search terms into the field and then click on the buttons that appear above the message list to determine whether the search applies to your current mailbox or to all mailboxes, and whether it searches the entire message content or just one of the headers. You can also use Boolean searches to track down messages in Mail (see "Advanced Mail Searches").

The Last Word

The moral of the story is that only you can decide what works best for you. If you already have organizational techniques that serve you well, then by all means stick with them. But if you don't have a system, or if your system isn't working well, some of the suggestions here may help set you on the right track. However, don't feel limited to just one strategy. You may find that a combination of filing and searching works best for you. For example, you may want to file away e-mail receipts but leave general correspondence in your inbox. Most importantly, keep in mind that once you've developed a system for managing your files, you have to stick with it. □



Color My World To make it easy to quickly distinguish personal mail from work-related mail in Entourage (left), create a color-coded system for all incoming mail. Use the Categories pane (right) to set up your colors, and then apply those categories to contacts.

JOE KISSELL is the senior editor of TidBits and the author of *Real World Mac Maintenance and Backups* (Peachpit Press, 2006).

He was a hardworking farm boy.

She was an Italian supermodel.

He knew he would have just one chance to impress her.

Rosetta Stone® The fastest and easiest way to learn ITALIAN.

Arabic Chinese Danish Dutch English (UK) English (US) Farsi French German Greek Hebrew Hindi Indonesian Italian Japanese Korean Latin Pashto Polish Portuguese Russian Spanish (Latin America) Spanish (Spain) Swahili Swedish Tagalog Thai Turkish Vietnamese Welsh

Learn a language. Expand your world. Finally, there's a way to learn a new language that's easier than you could ever imagine. Rosetta Stone interactive software teaches you any of 30 languages, all without translation, memorization, or grammar drills. It's so effective that NASA, the U.S. State Department, and a variety of Fortune 500® executives have made it their language tool of choice. That's also why we can back it with a six-month money-back guarantee.

The natural way to learn. Rosetta Stone's award-winning Dynamic Immersion™ method taps the skills you used to master your native language. By combining real-life images and the voices of native speakers, you become immersed in your new language and retain what you learn.

- **SPEAK:** Speech-recognition tools compare your pronunciation with a native speaker.
- **LISTEN:** Native speakers and everyday language develop your listening comprehension skills naturally.
- **READ:** Build your reading skills by linking written language to real-life objects, actions, and ideas.
- **WRITE:** Practice writing the new language and receive immediate feedback.

Act now to receive a 10% discount.
Personal Edition. Solutions for organizations also available.

Level 1	Level 2	Level 1&2 Best Value!
Regularly ~~$195.00~~	Regularly ~~$225.00~~	Regularly ~~$329.00~~
NOW $175.50	NOW $202.50	NOW $296.10

The fastest way to learn a language. Guaranteed.™

1-800-399-6162
Use promotional code ozs037 when ordering.

RosettaStone.com/ozs037

RosettaStone®
Language Learning Success

workingmac@macworld.com

Pry Windows Files Open

Sure, Apple's latest computers can run Microsoft's ubiquitous operating system natively, but a wide gulf remains between Windows and Mac OS X. Just take a gander at your inbox crammed full of Windows-created file attachments—attachments that do nothing at all when you double-click on them. To deal with these files, you need applications and utilities that can *make* them open.

The Usual Suspects: Office Files

When you talk about common Windows documents, you're talking about documents created in the Windows version of Microsoft Office. Microsoft's Macintosh Business Unit will tell you that all you need to open Windows Office documents is a copy of the $399 Microsoft Office 2004 for Mac (www.microsoft.com/mac). And in the case of Word and Excel, this is largely true. Both the Mac and Windows versions can open files created on the other platform—but those files will look far more alike if they contain font types common to the two platforms, such as Arial, Century Gothic, Comic Sans MS, Courier, Courier New, Georgia, Tahoma, Times, Times New Roman, Trebuchet MS, Verdana, and Wingdings.

PowerPoint is trickier, because of issues with the compatibility of embedded media—unsupported graphics and movies don't appear. If you get a PowerPoint presentation created by a Windows user, pray that the creator used typical media formats—BMP and JPEG for graphics and AVI for movies—as they work on both platforms. With common media and font types in place, you shouldn't have to muck much with PowerPoint presentations created on a Windows PC. (For help with some of the conversion drudgery, see macworld.com/1631.)

Help You Might Already Have If you don't have a copy of Microsoft Office 2004 for Mac, you can still open basic Word and Excel documents with applications you may have on your Mac. One such tool is Apple's TextEdit (/Applications), which can open simple Microsoft Word documents and display their text, but not their embedded graphics.

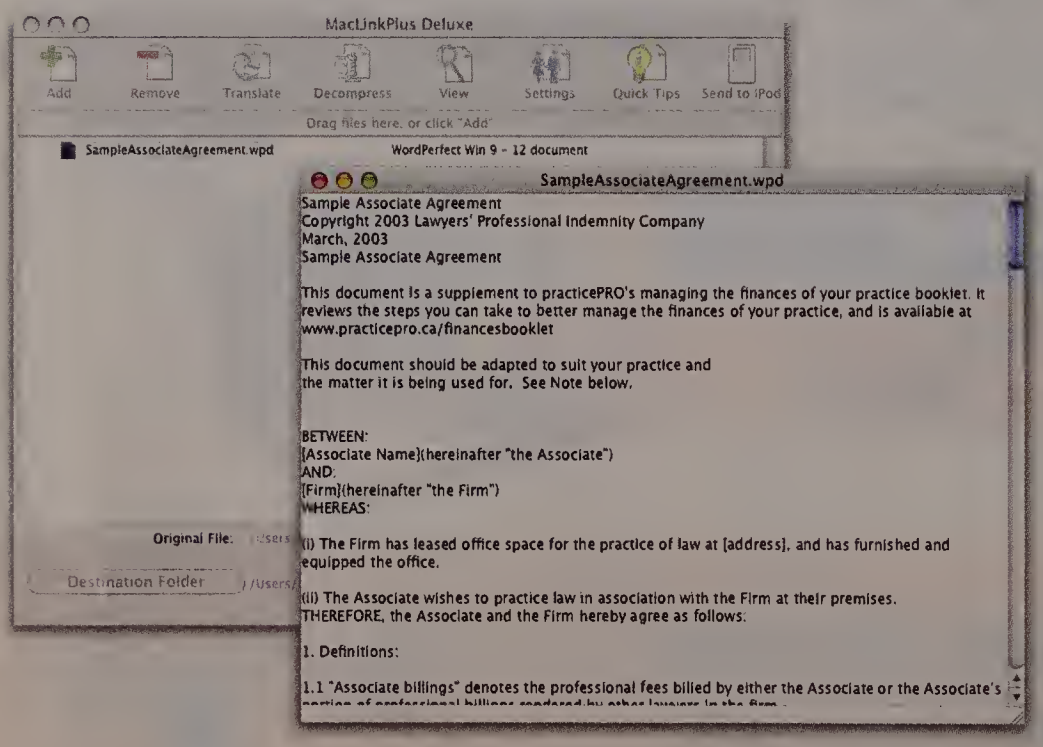
If you still have a copy of Apple's moribund AppleWorks (which used to ship with many Mac models before Apple stopped developing it), you can use it to open some Word and Excel documents—although sometimes with mixed results. For example, if a multipage Word document contains graphics, the application shows only the first page. If an Excel document contains multiple sheets, AppleWorks combines those sheets into a single spreadsheet document, denoting each sheet by a page break.

Apple's Pages 2 (★★★★; part of iWork '06, $79; macworld.com/1129) can also work with Word documents. It opens simple documents, as well as documents with embedded graphics and tables. Pages doesn't have a clue what to do with Excel documents. But the other app included in the iWork suite, Keynote 3 (★★★★; macworld.com/1128), can open PowerPoint presentations from a Windows PC (or a Mac).

Open-Source Aid To handle a wider variety of Office files, as well as files created by Windows word processors such as Corel's WordPerfect, turn to Patrick Luby and Edward Peterlin's free, open-source NeoOffice (www.planamesa.com). It handles Word documents well, displaying the original formatting and embedded graphics, tables, and Excel worksheets. (Like Word, it won't display graphics embedded in the original Excel worksheet.) NeoOffice opens Excel worksheets and, unlike AppleWorks, places sheets in separate tabs. Embedded graphics appear within these worksheets, though graphics that have been resized may appear distorted.

NeoOffice's one weakness is PowerPoint presentations. Though it can open them, their formatting often gets thrown off (for example, graphics and bul-

A Whole New View
Are you inundated with Windows files you can't open? DataViz's MacLinkPlus Deluxe can open most of the stubborn ones, so you can take a look inside.



lets appear in the wrong places or not at all). Complex presentations also stutter.

Beyond the Big Three: Access and More

That covers the Big Three Office applications, but one Microsoft program that stumps just about everyone is its database application, Access. There is no version of Access for the Mac, so a straight-across conversion is impossible. One application, .com Solutions' $100 FmPro Migrator (www.fmpromigrator.com), can convert Microsoft Access files for FileMaker 7 and 8. But as pros will tell you, even if you use FmPro Migrator, you'll spend a fair amount of time tweaking the database to get it right. People who do this for a living often export an Access file to Excel within Windows, bring the Excel file over to the Mac, drag and drop the Excel file into a FileMaker Pro file, and then build the database from there.

Handling the Curveballs Dominant though Office documents may be, they're not the only game in town. What should you do if you encounter files created with other popular Windows programs, such as Microsoft Works, WordPerfect, Lotus Software's Lotus 1-2-3, Nisus Software's Nisus Writer, or Corel's Quattro Pro (part of the WordPerfect Office suite)? In these cases, DataViz's $80 MacLinkPlus Deluxe 15 (www.dataviz.com) can help. This utility allows you to view the contents of a variety of documents created on a Windows computer and translate many of them to common Mac formats (see "A Whole New View").

Managing Media Files

Macs and Windows PCs generally agree on the major graphics formats. Both platforms support common formats such as JPEG, GIF, TIFF, PNG, and BMP—but a few odd ducks remain. If you find yourself in possession of such a duck—a PCX or WPG file, perhaps—turn to Lemke Software's $30 GraphicConverter X (★★★★½; macworld.com/1684). This application can not only convert just about any graphics file you throw at it (it can read 190 image formats and export almost 80), but also batch-process loads of graphics simultaneously.

Movies and More Movie and audio files are trickier to handle. Windows users generally view their videos in the AVI, DivX, and WMV formats—which, for the most part, the Mac's media player, Apple's QuickTime Player, doesn't support (QuickTime can play some AVI files but not others). MP3 audio files are just as common on the PC as they are on the Mac, but Windows users also commonly listen to WMA files, which aren't compatible with the Mac's default media players, QuickTime Player and iTunes.

When you receive a vexatious video or audio file, don't despair—you have options. VideoLAN's free VLC media player (★★★★½; macworld.com/1684) is the go-to utility when you can't get Windows video files to play. It can decode MPEG-1 and -2, DivX (and its many flavors), MPEG-4, H.264, and WMV. It also supports the Mac's standard audio formats (MP3 and AAC, for example), as well as MPEG Layer 1 and 2, Ogg Vorbis, FLAC, and WMA. Flip4Mac's $29 WMV Player Pro (www.flip4mac.com) lets you both play these files and convert them to QuickTime format.

QuickTime Helpers If you want to play Windows audio and video files *within* QuickTime or its browser plug-in, a couple of utilities can help. The free DivX for Mac (www.divx.com) installs the DivX Decoder component, which brings DivX compatibility to QuickTime and its plug-in. (Many AVI files are actually DivX-encoded files.) Microsoft no longer makes a Mac-compatible version of Windows Media Player; instead, use Flip4Mac's free Windows Media Components for QuickTime (macworld.com/2393). This utility installs a component in the QuickTime folder within the Library folder at the root level of your hard drive. Once this is installed, you can play Windows Media files within QuickTime and its browser plug-in. Also check out the Perian Project's free Perian (perian.org). This QuickTime component adds support for file formats including FLV, 2ivX, DivX, MS-MPEG4, Truemotion VP6, and Xvid. With Perian installed, you don't need the DivX components mentioned earlier to play back DivX files.

Full File Access

Now that you have the tools to open Windows documents, let your Mac know. Select a typical document—a WordPerfect file, for example. Then press ⌘-I to bring up the Info window, choose a host application from the Open With pop-up menu, and click on Change All. From now on, files of this type will open in your chosen Mac application. □

Senior Editor CHRISTOPHER BREEN is the author of *The iPod and iTunes Pocket Guide*, second edition (Peachpit Press, 2006).

CHECK IT OUT

Quiz Wiz

If you've ever gazed over a podium at a room full of blank, yawning faces, you know you'd do just about *anything* to make a presentation pass more quickly. Stephen McNutt's $35 **Classroom Quizshow 8.4** (www.classroomquizshow.com) can help. This program makes it easy to turn class-review or corporate-training sessions into quizshow–style games. Choose from four game formats, including Tic Tac (see "And the Answer Is"). Classroom Quizshow picks which team member competes first, throws a question up on the screen, and starts the countdown. It's an inexpensive way to make learning more fun.—SCHOLLE SAWYER McFARLAND

And the Answer Is Turn a boring presentation into an interactive game with Classroom Quizshow.

PLAYLIST

playlist@macworld.com

Doing the iTunes Shuffle

People sometimes refer to iTunes as a digital jukebox, but you may not know that it can function almost like a real jukebox (minus the coins). With its Party Shuffle feature, iTunes offers a way to either cue up music in the order you want or listen to music at random. Party Shuffle is a great way to set up music for parties—as its name implies—or even for your workday. Come learn the secrets of this feature.

playlist

Want more tips on digital music? For iPod- and iTunes-related expert advice and breaking news, as well as reviews of all the latest gadgets, check out Playlistmag.com.

The Basics

iTunes' Party Shuffle feature is a special type of dynamic playlist. You access it by clicking on the Party Shuffle listing at the top of the Playlists section of iTunes' Source list (if you don't see Party Shuffle, open iTunes' General preferences and select it).

Party Shuffle is iTunes' equivalent of the iPod's Shuffle Songs feature, except that you get to see what's coming next (see "Party Time"). Party Shuffle chooses songs at random from your library, and if you don't like what it has picked, you can click on the Shuffle button to make iTunes deal you a brand-new hand. If you want to skip a song that's playing, just click on the Next button; to go back to the previous song, click on the Previous button. If you don't want to listen to certain songs in the list, simply select and delete them as you would items from any playlist; iTunes will remove them from Party Shuffle, but not from your library, and other songs will pop up at the bottom of the list to replace them. If you want to leave songs in Party Shuffle but skip them, just uncheck the boxes to the left of their names.

Party Time With Party Shuffle, you have a personal DJ at your fingertips.

When you first click on the Party Shuffle icon, you'll see a list of tracks. Party Shuffle shows the song that will start off your shuffle, as well as a number of upcoming songs—those it has put in the play queue. By default, it displays the five most recently played Party Shuffle songs. From the Display pop-up menus at the bottom of the screen, you can change the number of upcoming and recently played songs shown, but the latter won't appear until you start playing music from Party Shuffle. This list lets you see what's been playing—in case you left your Mac for a while—and you can play a song again by dragging it down to the list of upcoming songs. You can also rate songs you've heard recently by control- or right-clicking on a song name, selecting My Rating, and choosing a number of stars.

By default, Party Shuffle selects its contents from your entire music library. But you can narrow down the field: from the Source pop-up menu, select a playlist, and Party Shuffle changes to show only music from this playlist. (Note that you can't use a shared library, an iPod, or a CD as a source for Party Shuffle.)

Is It Really Random?

Much has been written about the randomness (or lack thereof) of the iPod's Shuffle Songs feature, and Party Shuffle probably obeys the same rules. There is, however, a difference between the two: you can influence the way Party Shuffle chooses its songs. First, you can enable the Play Higher Rated Songs More Often option that appears at the bottom of the iTunes window when Party Shuffle is visible (this is useful only if you rate your music, of course). Second, you can choose the degree of randomness for Party Shuffle in iTunes' Playback preferences. The Smart Shuffle section has a slider that lets you adjust the way Party Shuffle selects music, determining how likely it is that iTunes will play multiple songs in a row by the same artist or from the same album (see "Free to Decide").

Randomness Settings By default, the slider is in the middle of its range, set to Random. iTunes will select songs truly at random, and you may hear songs by the same artist or from the same album sequentially. If

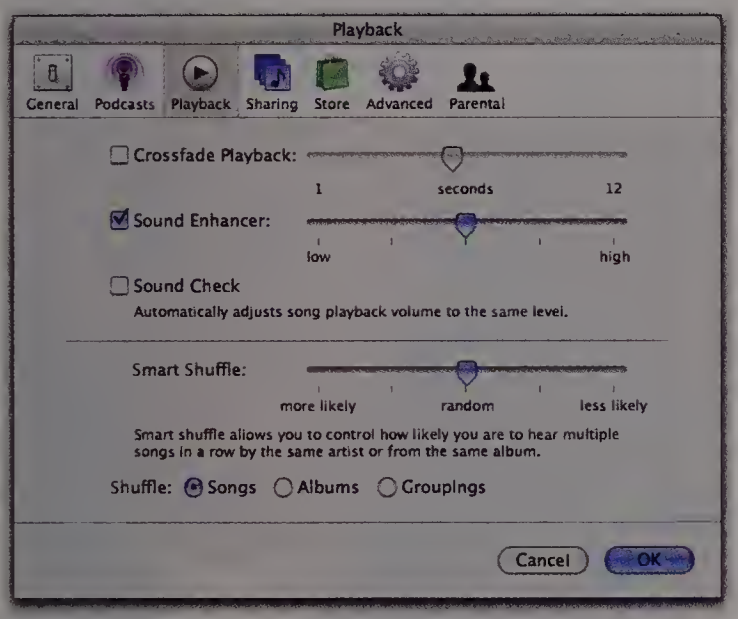
you move the slider toward Less Likely, you'll have fewer chances of hearing, say, two Bob Dylan songs in a row; move it all the way to the right, and that will probably never happen (unless you select a playlist of Dylan songs as your source). Drag the slider toward More Likely, and the opposite occurs; drag it all the way to the left and Party Shuffle groups your music by album or by artist. You can play with this setting to suit your taste and mood.

Shuffle Settings Another way to influence Party Shuffle is to change the Shuffle setting—also in the Playback preferences—which lets you choose between Songs, Albums, and Groupings. This setting mainly affects playlists for which you've enabled the Shuffle function to randomize your music, but it also has some effect on Party Shuffle. The first choice tells iTunes to shuffle individual tracks; the second, entire albums; the third, groupings. However, only the Groupings choice has any real effect on Party Shuffle (see "Grooving to Groupings" for tips on using this feature).

Skip Setting Finally, you may have tracks that you never want to pop up during a Party Shuffle. To deal with one of those songs, select it, press ⌘-I, click on the Options tab, and select the Skip When Shuffling option. To avoid multiple tracks, highlight them, press ⌘-I, and select Yes from the Skip When Shuffling pop-up menu at the bottom of the Info window that appears. Either method tells iTunes to never add those tracks to Party Shuffle (keep in mind that it also exempts the track from the iPod's Shuffle Songs list).

You're in Charge

While you can let Party Shuffle fill itself randomly, you can also take charge of this special playlist and add only the music you want. If you control- or right-click on any song or group of songs, two useful contextual-menu items appear: Play Next In Party Shuffle and Add To Party Shuffle. Selecting the first option places the selected items at the top of the Party Shuffle list and starts playing the first one, as long as no songs are playing in iTunes; otherwise, it puts them just after the current song. The second option adds the selected songs to the end of the Party Shuffle list. In this manner, you can fill your Party Shuffle from anywhere in iTunes—from your library or from any playlists. Note that adding songs to a Party Shuffle may give you a playlist that doesn't comply with your Upcoming Songs setting.



Free to Decide iTunes' Playback preferences let you choose how random Party Shuffle is.

Blank Slate If you want to start from scratch—to put together the music for your next party, for example—there's an easy way to do so. Create a new playlist in iTunes (select New Playlist from the File menu or click on the plus-sign [+] button below the Source list), and name it something easy to remember, such as Empty. Select this playlist as Party Shuffle's source, and you'll see that Party Shuffle itself is empty (or it may have a song from the previous Party Shuffle). You can now browse your music library and add songs from the contextual menu, as described previously, or simply drag them onto the Party Shuffle icon.

If you're in Browse mode (while you're in the Music library, click on the eye icon at the bottom right of the iTunes window, select Show Browser from the View menu, or press ⌘-B), you can even drag entire albums, artists, or genres into Party Shuffle. In all of these cases, the new music you add appears at the end of the Party Shuffle list. If you're in either of iTunes' album art view modes (click on the middle or right of the three View buttons in the top right corner of the iTunes window), you can also drag an album cover to Party Shuffle. This, too, adds the contents of that album to the end of the list.

Once you've added music in this manner, you can drag tracks into the desired order. You can use Party Shuffle to cue up specific songs for parties or for everyday listening, shifting between total chance and total control. To go back to full randomness, select Music as your source again.

Grooving to Groupings

iTunes offers a little-used tag called Grouping—found in a track's Info window just above the equally ignored Composer field—that comes in handy with particular types of music. With the Grouping tag, you can assign a name to multiple tracks, and iTunes and Party Shuffle will treat those tracks as a group and play them in the correct order if you've set Shuffle to Groupings.

Groupings are most useful for classical music, in which works often span several tracks, and items such as live concerts and concept albums. Say you have a set of Beethoven's string quartets. Within that album, you can assign individual names to each work using the Grouping tag. You could select all the tracks of op. 59, no. 1, and then, in the Grouping field, enter the name of the work. If you do this for all your classical works (many classical albums that iTunes sells already have the Grouping field filled in), and set iTunes to shuffle by Groupings, Party Shuffle will play your classical works in random order, but it will group the tracks from each work and play them in the correct order. This lets you set up your own classical radio station for home or office.

KIRK McELHEARN is the author of several books on the Mac and the iPod, including *iPod and iTunes Garage* (Prentice Hall, 2004). His blog, Kirkville (www.mcelhearn.com), features articles about OS X, the iPod, iTunes, and much more.

Stop Seeing Red

The days of airbrushing, dye transfers, spotting, and etching are long gone, but the need to clean up or enhance photographs has never been greater. Portraits in particular can require a certain amount of retouching to flatter the subject. Frequently, this requires only basic cleanup—remove a mole, take out a stray hair, and so on. But other problems, such as uneven skin tones, are less straightforward.

By the Book This article is an excerpt from *Skin: The Complete Guide to Digitally Lighting, Photographing, and Retouching Faces and Bodies,* by Lee Varis (copyright 2006; reprinted by permission of Wiley Publishing).

Red, blotchy skin often looks worse in digital images because the Bayer-pattern imaging systems used to interpret cameras' image data tend to overemphasize the red component in skin color. As a result, pimples and red blotches tend to go nuclear. Fortunately, the problem is relatively simple to fix in Adobe Photoshop ($649; www.adobe.com) by using a Hue/Saturation adjustment layer. (The following steps also work with Adobe's $80 Photoshop Elements 4.)

Isolating the Problem

Click on the Adjustment Layer icon in the Layers palette and choose Hue/Saturation from the drop-down menu. In the Hue/Saturation dialog box, change the Edit drop-down menu to Reds.

With the left eyedropper toward the bottom of the dialog box selected, move the cursor (the eyedropper sampler) over the image, and click on the brightest red pimple. The sample-region slider (indicated by the gray bars in the rainbow gradient) will move slightly to center over the selected color. Then select the minus-eyedropper tool (on the right) and click on an area of good skin color. The sample region will shrink somewhat to indicate the more constrained sample area.

This part is the trick: we are going to temporarily apply a radical hue shift to help visualize the selected region. Push the Hue slider all the way to the left. The selected reds in the face will turn bright cyan. If too much of the image has been selected, simply drag the right triangle slider in the gray sample region to the left to trim the selection and limit the effect to those areas that are too red and blotchy (see "Spotting the Problem").

Making the Change

After you have identified the region that will be affected, you can employ a more attractive color shift. Drag the Hue slider to the right, past zero and toward yellow. Stop when you've killed the red curse.

PHOTOGRAPHS BY KEN CHERNUS

Better-Looking Skin Red, blotchy skin is a common problem in portraits. The skin appears much healthier after a Hue/Saturation adjustment.

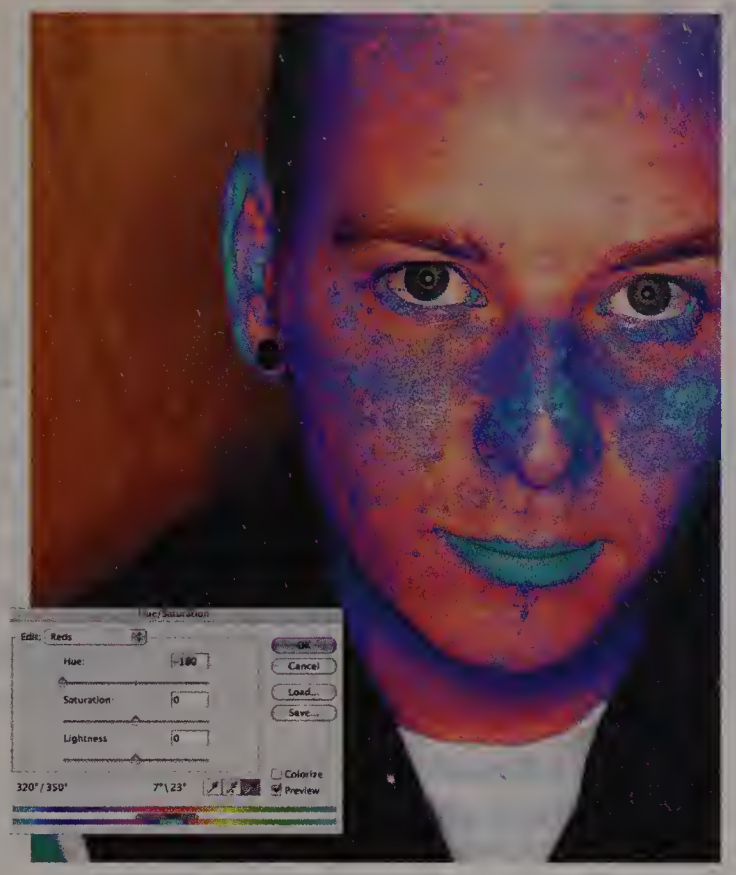
Use the Info-palette numbers to determine if the skin values in the pimple regions are within the correct range (move the cursor into the image to get a reading). Because pimples are also darker than normal skin, you may need to push the Lightness slider to the right until you get better tonal uniformity. Don't go too far; it will reduce the saturation of the skin tone and may make your colors look unnatural.

Some areas of the face might be too yellow. You can adjust these areas in a similar fashion. In the Hue/Saturation adjustment-layer dialog box, change the Edit drop-down menu to Yellows. Use the eyedropper tool to select the region that is too yellow; then subtract the red pimple areas with the minus-eyedropper tool (these are now already shifted). Apply the radical hue shift to visualize the affected region, and trim the selection further if necessary. Push the Hue slider slightly to the left to make the yellow regions redder. The Edit drop-down menu, which did say Yellows, will change to Reds-2 to indicate that you are editing another red region.

Once you're done, you should find that the Hue/Saturation adjustment has hidden most of the pimples and given the skin a much healthier look—all without your touching a single retouching tool.

Finishing Touches

You might want to mask off the red to reduce the effect of the Hue/Saturation adjustment on the lips—especially with photos of women. Just paint into the Hue/Saturation adjustment layer with black to mask out the lips. In this image, I also brushed a little blue color into the eyes to relieve some of the monochromatic nature of the shot.



Spotting the Problem By shifting the Hue slider all the way to the left, you can quickly see which areas will be affected. Use the Sample Region sliders to select just the problematic red tones.

Although you've toned down the red, some pimples may still appear darker than the surrounding skin. To carefully lighten these areas without otherwise affecting the color or texture of the region, use a dodge-and-burn layer set to Soft Light mode (see "Dodging Minor Imperfections").

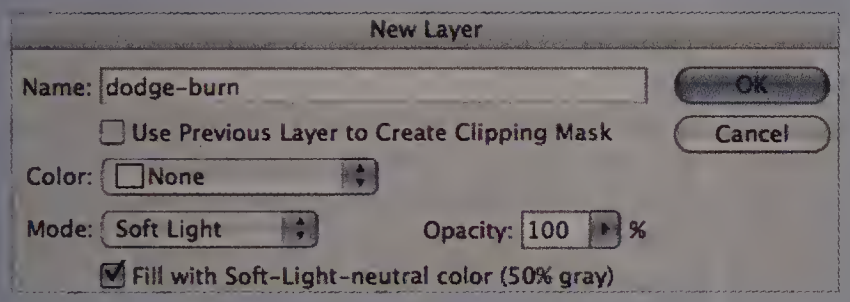
In the end, all of the pimples have become soft freckles, and we haven't corrupted the skin texture. □

LEE VARIS is a Hollywood photo-illustrator. His images have appeared in *National Geographic*, *Newsweek*, and *Fortune*.

Dodging Minor Imperfections

To minimize the appearance of fine lines and blemishes, without destroying the skin's texture, create a special layer for dodging and burning (selectively lightening and darkening).

First, hold down the option key and click on the New Layer icon in the Layers palette (or select Layer: New: Layer). This will bring up the New Layer dialog box (see "Light Your Way"). The trick is to change the Mode to Soft Light and then select the Fill With Soft-Light-Neutral Color option. This will fill the new layer with 50 percent gray. In a Soft Light or Overlay layer, 50 percent gray has no effect on the underlying image. However, when you use the Dodge tool to lighten the gray layer, it will lighten the underlying image as well, without affecting the color or texture. I recommend using the Soft Light mode because it has a gentler effect than Overlay and tends not to increase the saturation as much.



Light Your Way The New Layer dialog box lets you change the mode and fill the layer with 50 percent gray in one step.

Next, select the Dodge tool in the Tools palette, choose a low Exposure setting, and then brush over the wrinkles or blemishes to gradually lighten them.

Nip and Tuck Switch the layer mode to Normal and lower the opacity to see how your dodging lines up with the underlying image.

If you temporarily change the layer mode back to Normal, you'll be able to scrutinize your work. The dodge marks will appear in the gray layer. Reduce the layer's opacity to see where your dodge marks line up on the face (see "Nip and Tuck").

If you go too far, you can repair the effect by painting over the Soft Light layer with a brush set to 50 percent gray at a low opacity. If you need a stronger lightening or darkening effect, you can duplicate the layer by dragging the Layer thumbnail onto the New Layer icon in the Layers palette.

Get Your Web Site Noticed

Whether you're an expert on Pez dispensers or a budding entrepreneur, programs such as Apple's iWeb and Adobe's Dreamweaver, as well as online tools like Blogger and WordPress, make it easy to create Web sites that communicate your passion. Of course, getting those Web sites noticed is another matter entirely. Luckily, there are a few free and easy ways to lead the masses to your front door.

Kiss Up to Search Engines

Search engines are the most powerful way to draw an audience. If your site pops up in Google's or Yahoo's search results, that can mean thousands of new visitors. But how do you raise your site's search-engine profile? Here are a few tricks:

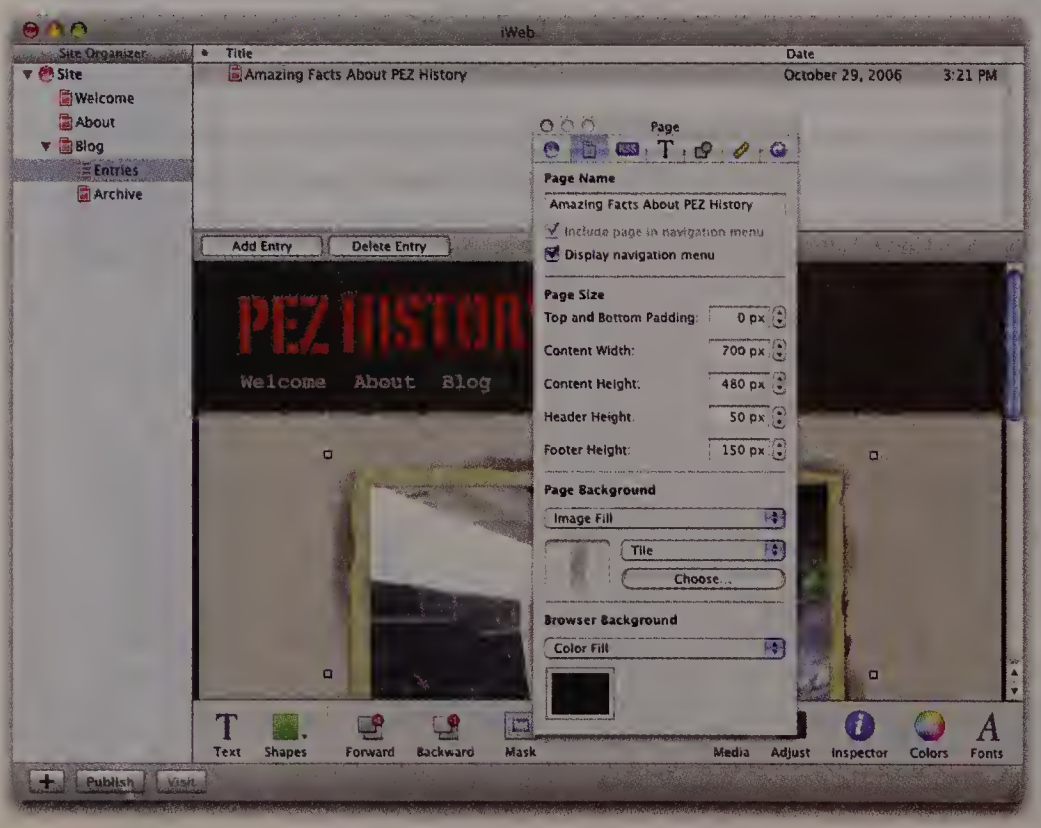
Use Plain Text Don't bury your content in Flash movies, graphics, podcasts, or PDF files. While some search engines can read these types of files, they prefer regular ol' text coded in regular ol' HTML.

Make sure to create HTML versions of any PDF files on your site. If you're offering podcasts, it's important to include show notes—Web pages that summarize the content and emphasize the main topics of each episode. And if you must put text inside a graphic, supply a text description with the image's alt attribute. In Dreamweaver, select the graphic and type a short description in the Property Inspector's Alt box. Unfortunately, iWeb doesn't let you add alt text to your images.

Integrate Keywords Think about words that potential visitors to your site might enter into a search engine. For example, possible search terms for your Pez site might include *Pez history*, *collectible candy dispenser*, and *Star Wars Pez*. For help identifying keywords, check out the Keyword Selector Tool site (macworld.com/2421). Simply enter a subject into the text box, and the site will return a list of related search terms.

Once you identify your keywords, it's important to actually use them in the text of your Web pages. If you write page after page about the history of Pez dispensers but never actually use the words *Pez history*, your site won't make the results page when someone searches for that term. Try to use keywords in the first few paragraphs of your text—search engines give more weight to words that appear near the top of a page than to those at the bottom.

Use Headers and Titles Search engines assign greater value to words located in titles and headlines than to body text. So try to incorporate the most relevant keywords in your pages' titles and headings, especially the text inside the <h1> tags. If you use Dreamweaver, type your headline text, and then select the headline type (Heading 1, Heading 2, and so on) from the Property Inspector. Unfortunately,



What's in a Name? Using iWeb's Inspector window, you can easily title your Web pages.

Avoid Scams

Beware of offers that guarantee top placement with search engines. There's no shortcut to good placement, and some dubious tactics employed by disreputable companies can get your site banned from a search engine. For example, in early 2006, Google temporarily banned the German BMW site (www.bmw.de) because it sent different Web content to the Google search bots than it was providing to regular site visitors.

Some infamous scams include filling a page with nonsensical keyword-rich text, hiding keyword-rich text by making it the same color as a page's background, and participating in link farms—Web sites that exist merely to increase the number of incoming links to your site.

You can find more information about which tactics Google deems acceptable at macworld.com/2435.

iWeb doesn't give you any control over the HTML it creates.

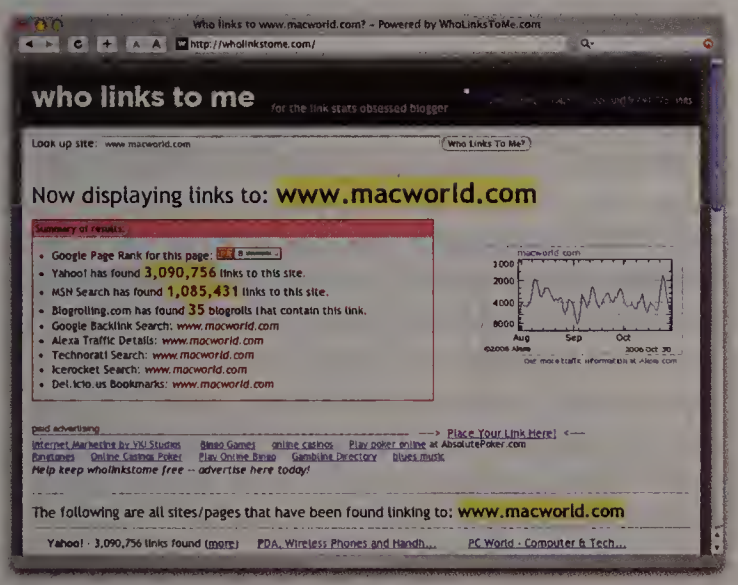
As for titles, make sure to give each page on your site a unique, specific title that identifies the main topic; avoid using your site or company name for each page. If you're using Dreamweaver, always change the default title (Untitled Document) when you create a new page, by typing a name in the title box at the top of the document window. iWeb users can use the Page Name box in the Inspector window's Page pane to set a page's title (see "What's in a Name?").

Tip If you're trying to draw attention to a site you've created on Blogger or another blogging service, keep in mind that most of these sites wrap the title of each post in a headline tag. So make sure your titles for each entry are descriptive and include keywords.

Make Friends

A Web site will rank higher in a search engine's results if other sites link to it. But not all links are created equal. Sites devoted to related topics make for more-valuable links and, therefore, higher search rankings. To take advantage of this, approach the owners of pages similar to yours and suggest a reciprocal linking arrangement. To keep track of which sites are linking to yours, visit Who Links to Me (www.wholinkstome.com). Using search data from the likes of Google, Yahoo, and MSN, Who Links to Me provides information on how many sites—and which ones—link to yours (see "How Popular Are You?").

Links from other sites are important for search-engine rankings, and they provide more ways for people to find your Web site. Participate in forums that discuss topics related to your site's focus, and remember to include your Web address in your forum signature or your user profile page. Though these links probably won't help you out with search engines, they may result in increased traffic as you become better known within a community. But don't become a shill. You'll likely do better if you post relevant information on the forum, not just "Visit my cool site" posts.



How Popular Are You? If you want to find out who's linking to your site, check out www.wholinkstome.com.

Draw an Audience

The best way to attract visitors to your site is to create strong content that's constantly updated. Here are a few rules that can help you accomplish that:

1. Stick to What You Know Whether you want to blog about local politics or chronicle the progress of your home remodeling projects, make sure you're passionate about the topic of your Web site. Your enthusiasm will help draw readers who share your passion. But don't be too self-involved. Think about what your readers want from your site. While most people probably don't care what your favorite books are, they may be interested in reading book reviews.

2. Go Deeper Look for new and interesting ways to present content. For instance, if you're selling handmade imported rugs, go beyond the basic sales pitch by providing stories about the places the rugs are made or the people who make them.

3. Update Frequently Once you've attracted users to your site, keep them coming back by making sure that your content is fresh and up-to-date.

Beyond Search Engines

Of course, search engines aren't the only game in town. There are other ways to draw users to your site.

Tap into Social Sites A good way to get your site noticed is to get it onto one of the popular social bookmark sites like Digg (www.digg.com) or del.icio.us (del.icio.us). Digg highlights Web pages that are submitted and voted on by users. The more votes a story gets, the higher it moves on Digg's Popular Stories pages. The del.icio.us site lets users create Web-based bookmarks for their favorite links and then tag those bookmarks with keywords. Users can discover one another's bookmarks by searching for keywords; if many people bookmark the same page, it gets promoted to a Most Popular list.

To get your Web page listed on Digg or del.icio.us, provide a button that lets visitors easily add your page to those services. Both sites provide the necessary HTML code (at digg.com/tools/buttons and del.icio.us/help/savebuttons).

Popularize Your Podcast Podcasters have additional avenues for self-promotion. First, of course, there's the iTunes Store. To get listed in iTunes, you'll have to jump through a few technological and bureaucratic hoops, such as filling out an application and creating an RSS feed (a special file you place on your Web server along with the podcast). Not all podcasts are accepted, but if you want to give it a shot, visit macworld.com/2422 for more information.

iTunes isn't your only alternative. You can also try a podcast directory, such as the popular Podcast Alley (www.podcastalley.com). To get listed there, simply click on the Add Your Podcast link in the left column of the site's home page. Other directories to consider include Podcast.net and Yahoo's podcast directory (podcasts.yahoo.com/publish). You can find a more extensive list of podcast directories at macworld.com/2423. □

DAVID SAWYER McFARLAND is the author of *Dreamweaver 8: The Missing Manual* (O'Reilly, 2005) and *CSS: The Missing Manual* (O'Reilly, 2006).

Reclaim Hard-Drive Space

Hard drives have a way of filling up—especially laptop drives. Although desktop Macs come with up to 750GB of hard-drive space, some Mac laptops still ship with hard drives as small as 60GB and the biggest laptop drive money can buy holds only 200GB. Install OS X and your favorite apps, and then add your music collection, photos, and videos—and that space can disappear in a flash.

If you can't get a larger hard drive for your portable Mac, the easiest way to get more storage space is to get rid of stuff you don't need. To start the process, consider the following suggestions.

Abolish Applications

Your programs can consume a surprising amount of space: iPhoto 6, for example, takes up more than 500MB. You can reclaim a significant amount of space by looking through your Applications folder for programs you never use and then deleting those apps.

Once you've identified a program you don't need, you can't just drag it to the Trash. Many apps stash resources all over your hard drive, making it hard to delete all of them manually. Several utilities can help you find and remove apps and all their auxiliary pieces—for instance, Austin Sarner and Brian Ball's $13 AppZapper (♦♦♦½; macworld.com/2432), Synium Software's CleanApp ($10; macworld.com/2447), and Reggie Ashworth's AppDelete (free; macworld.com/2448).

You can also reduce the size of the applications you want to keep by using J. Schrier and I. Stein's free Monolingual utility (monolingual.sourceforge.net). Most apps come with support for different languages; removing that support for languages you don't need can dramatically shrink an application's footprint. Monolingual automates this task. By removing all languages except versions of English from my three Macs, I trimmed between 1.4GB and 2.5GB off my hard drive.

Prune Printer Drivers

Weeding out printer drivers you don't need is another good way to make more room on your hard drive. This is especially true if you don't usually print from your laptop. By default, OS X installs about 2GB of printer drivers in /Library/Printers. To save space, delete any printer brands you never use. Start by dragging the entire folder representing a selected brand to the Trash. If you need still more space, delete drivers for individual printers. But be careful: If you take your laptop on the road or buy a new printer later on, you may wish you had one of those drivers. So delete only the brands and models you're certain about.

Find the Big Files

Your next step is to find your biggest remaining files. A good way to start is by creating a Finder smart folder that locates files bigger than 5MB. (If the smart folder finds just a few files, decrease the size to 3MB; if it finds many thousands, increase the size to 7MB or 10MB.) Display the folder's contents in List view, and then sort them either by size or by type (music, photos, or disk images, say). You won't automatically delete all your large files, but sorting them this way makes it easier to see which ones are needlessly taking up space.

A couple of utilities can also help. ID-Design's WhatSize (♦♦♦♦; macworld.com/2433) automatically sorts all files and folders at the root level of your

PHOTOGRAPH BY PETER BELANGER

CHECK IT OUT

Sleeves with Something Extra

Using a laptop sleeve has one drawback: a sleeve holds *only* a laptop—a problem when you want to carry just your sleeve. Incase (goincase.com) and Marware (www.marware.com) offer alternatives. Incase's $50 stylish Nylon Sleeve is a padded sleeve for the MacBook and the 15-inch MacBook Pro. It has interior pockets for pens, cables, and cards, and two external pockets large enough for your laptop's AC adapter and a portable hard drive. Even though it's principally a sleeve, it has handles and a padded shoulder strap. Marware's $80 SportFolio Deluxe (for all MacBooks and MacBook Pros) fills the middle ground between a sleeve and a traditional laptop case. Made of neoprene, the SportFolio Deluxe has rigid-panel sides and a rubber bottom. It provides good protection, as well as a zippered pocket that includes labeled storage areas for pens, your AC adapter, an extra battery, your Apple Remote, and an iPod or a digital camera.—DAN FRAKES

drive, by size (including files that are normally invisible). For people who are visually oriented, Erwin Bonsma's GrandPerspective (♦♦♦♦; macworld.com/2433) scans a volume or folder and creates a visual representation of the space occupied by each file on it.

Cull Your Media Files

For many of us, photos, movies, and music files are the biggest disk hogs. A typical iTunes track occupies about 4MB; a typical photo runs about 1.5MB; a one-hour TV show from the iTunes Store occupies more than 250MB.

Begin by weeding out duplicates. In iTunes, go to View: Show Duplicates to display all tracks with identical names. Unfortunately, this frequently shows you tracks that are different but just happen to have the same title. For a more intelligent approach, try Wooden Brain Concepts' iDupe ($8; www.woodenbrain.com), which scans track names and other data to help you more easily identify true duplicates. Similarly, with iPhoto, try Brattoo Propaganda's Duplicate Annihilator ($8; www.brattoo.com/propaganda/), which does for photos what iDupe does for music.

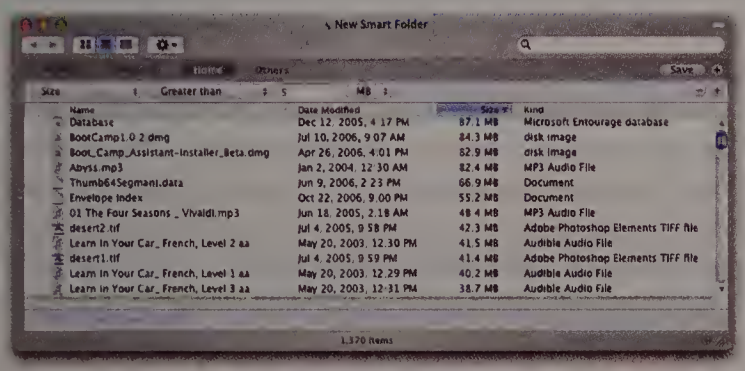
In iTunes, look for old podcasts (or even TV shows); if you're never going to play them again, delete them. In iPhoto, you don't need 13 different versions of every vacation photo—save the best shot or two of each scene and delete the rest.

If your laptop is *not* your main Mac, make sure your main Mac has copies of all your media files, and then remove the files you don't need frequent access to from your laptop.

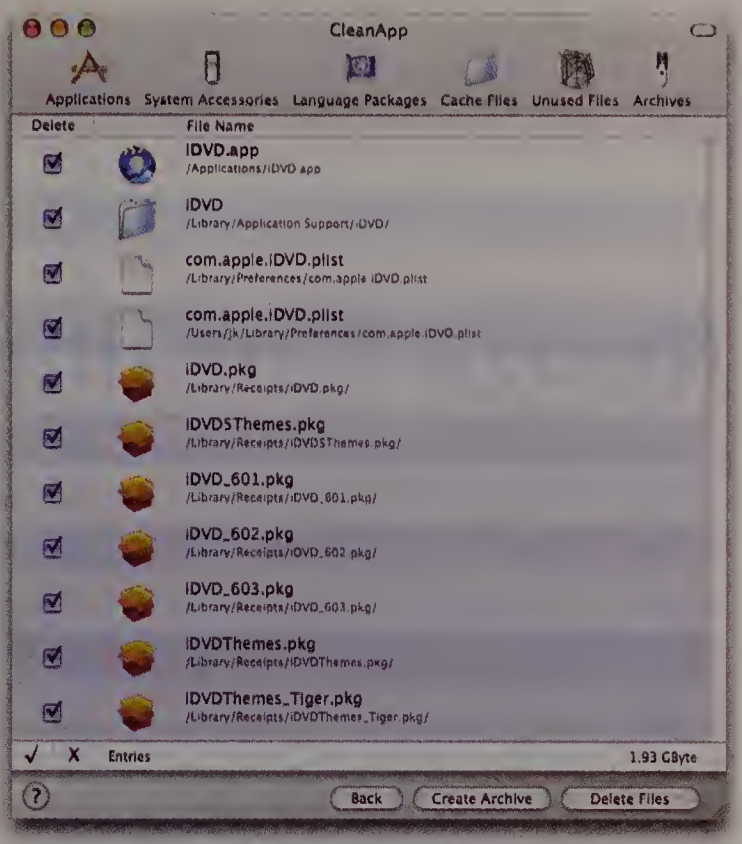
Clean Caches

Many applications, as well as OS X itself, cache data to improve their performance. Over time, these caches can grow enormous, bogging down performance and eating up disk space.

You can usually delete cache files with impunity, because the applications that created them regenerate them automatically the next time they're needed. You'll find many of them in /Library/Caches and *your user folder*/Library/Caches. To simplify the process, use a utility that automatically deletes caches, such as Maintain's Cocktail ($15; www.maintain.se/cocktail).



Hunting for Big Files A smart folder that finds files larger than a certain size is a simple way to identify hard-disk hogs.



Clean Your Hard Drive CleanApp, like AppZapper and other utilities, can help you get rid of applications and all their associated files.

Eliminate Excess E-mail

If you habitually save copies of all your e-mail messages (especially if that includes outgoing messages), your e-mail can take up tons of disk space. Consider using a program such as Pubblog.com's MailSteward ($50; www.mailsteward.com) to archive older messages to external media or another computer.

For messages stored in your e-mail client, attachments increase space requirements even further. In Mail, you can remove attachments from saved or sent messages—a good idea if you have copies of the files elsewhere—by selecting one or more messages and choosing Message: Remove Attachments.

Digital Dust Bunnies

There are lots of other little bits and pieces that accumulate on your hard drive. Occasionally, you need to sweep them away and do what you can to keep them from accumulating again.

> Use a Finder search or a utility like CleanApp to identify files you haven't used in a long time. If you haven't touched a file in a year, archive it to external media and delete the original.

> You'll probably accumulate installers and disk-image files in your browser's Downloads folder. Once you've installed a piece of software, you can usually delete the installer or disk image.

> Your Documents folder is often the default storage spot for applications. Every few months, scan it and its subfolders, and delete any items you no longer need.

> Try emptying your trash (Finder: Empty Trash) at least once a month.

> Compress files that you want to keep but that you use infrequently—select a file or folder and choose File: Create Archive Of *file name*. Then delete the original, uncompressed item. (Allume's StuffIt Deluxe [$80; www.allume.com] produces smaller file archives.) □

JOE KISSELL is the senior editor of TidBits and the author of *Real World Mac Maintenance and Backups* (Peachpit Press, 2006).

Resize Partitions On-the-Fly

Command-line enthusiasts know that if you can do something in the regular Mac interface, you can usually do it faster using Terminal. But as of Mac OS X 10.4.6, Terminal also lets you perform a feat that previously required add-on software. Using a hidden command, you can resize disk partitions on-the-fly, *without* losing data.

This command lets you change the size of an Intel Mac's partitions, or of external disks connected to that Mac, while the data remains untouched—a job that used to require software such as Coriolis Systems' $45 iPartition (www.coriolis-systems.com). The addition of this feature is a boon to anyone who has ever split up a disk, realized that one partition was too small, and then suffered through backing up, repartitioning, and copying data back to the drive once again. (For more information about partitioning, see "Multiply Your Drive" at macworld.com/1262.) Of course, you should *always* back up data before messing with your disk, but if all works as planned, your backup will now just be a safety net.

What's the magic command? It's a function of the `diskutil` command called `resizeVolume`. It's so secret that it doesn't even display in the appropriate `man` page. However, by typing `diskutil resizeVolume` in Terminal (/Applications/Utilities), you'll get an overview of the command and its syntax.

Note that this command works only on Intel Macs with hard disks formatted using the GPT (GUID Partition Table) format with a journaled Hierarchical File System Plus (HFS+) file system. This is the default for Intel Macs' hard disks, but you can also format an external drive in this manner through Disk Utility (/Applications/Utilities).

Particular Partitions
Before you can resize your partitions, you need to know their proper names. Use the `diskutil list` command to discover those names. Its output shows you the partition identifiers A.

Terminal — bash — 80x24

```
$ diskutil list
/dev/disk0
   #:                       type name           size       identifier
   0:  GUID_partition_scheme                    *298.1 GB  disk0
   1:                        EFI                200.0 MB   disk0s1
   2:                  Apple_HFS Macintosh HD   34.9 GB    disk0s2  A
   3:                  Apple_HFS Backup         19.9 GB    disk0s3
   4:                  Apple_HFS Storage        242.8 GB   disk0s4
/dev/disk1
   #:                       type name           size       identifier
   0:  GUID_partition_scheme                    *298.1 GB  disk1
   1:                        EFI                200.0 MB   disk1s1
   2:                  Apple_HFS Music          297.8 GB   disk1s2
/dev/disk2
   #:                       type name           size       identifier
   0:  GUID_partition_scheme                    *232.9 GB  disk2
   1:                        EFI                200.0 MB   disk2s1
   2:                  Apple_HFS Untitled HD    232.6 GB   disk2s2
```

Gather Info

To use the `resizeVolume` command, you need to get some information: you must be able to specify *which* partition you want to resize. You also need to know the partition's size limitations, since it must be big enough to hold data already on the disk.

To find the partition's name, type `diskutil list` in Terminal. Press return and you'll see a list of all the disks on your Mac (see "Particular Partitions"). The one labeled /dev/disk0 is your boot disk. If you have other disks, they're named disk1, disk2, and so on. Look under the Identifier header for the names of the disk's partitions; for example, disk2s2. (Ignore any partitions labeled GUID_partition_scheme or EFI.)

Now you need to find out what size your new partition can be. Run this command: `diskutil resizeVolume` *`disk_identifier`* `limits`, replacing *`disk_identifier`* with your partition's identifier. This will return the current size of the partition, as well as the minimum and maximum sizes you can use. For example:

```
For device disk2s2 Untitled:
Current size: 215822106624 bytes
Minimum size: 6691028992 bytes
Maximum size: 215822106624 bytes
```

Compose Your Command

Now that you know the disk's name and size limits, prepare your command. It should follow this basic model:

`diskutil resizeVolume` *`disk_identifier partition_size second_partition_format second_partition_name second_partition_size`*

The first part of the command is, of course, the command itself: `diskutil resizeVolume`. Follow that with the identifier and size of the partition you'd like to split. Type in the size you *want* this partition to be, not what it currently is. So, for example, if you want the first partition to be 100GB, specify `100G`. (Notice that you drop the *B* from the abbreviation for *gigabyte*; you'd do the same for *megabyte*). Finally, specify the format, name of your choosing, and size for the partition you

want to create. Want more than two partitions? Just add additional arguments to your command.

Although you can resize the first partition, you *can't* change its format—that's why you don't need to specify one for it. For each additional partition you wish to create, you must specify the format you want it to adopt. For example, type `JHFS+` for journaled HFS+, `HFS+` for unjournaled HFS+, `MS-DOS` for FAT32, `UFS` for Unix File System, and so on. You must specify the size for each partition. For example, to create a 100GB partition in journaled HFS+, you'd type `JHFS+ new_partition_name 100G`.

You cannot create a bootable partition for Boot Camp using this command. The `diskutil resizeVolume` command will resize your disk, partition it, and format it to use MS-DOS, but it can't install an MBR (Master Boot Record) on the disk. To make a bootable partition for Windows, you must use the Boot Camp Assistant (macworld.com/2436) or partition your disk with the `diskutil partitionDisk` command, which will destroy all data on it. (Type `man diskutil` in Terminal for more information on this command.)

The Command in Action

Here's an example of a slightly more complicated `diskutil resizeVolume` command at work:

```
diskutil resizeVolume disk2s2 100G JHFS+ Part2 100G
```

This command splits a single partition in two. It specifies a size of 100GB for the first partition. Then it creates a new, second partition, named Part2, using the journaled HFS+ format, with a minimum size of 100GB. If there's more empty space in the partition, the command will use it all. So if you split a 232GB partition, the above command would give you a first partition of 100GB and a second partition of 132GB.

Two Disks, Two Formats You can also use this command to make partitions with different formats if you need more disk space for Boot Camp. Using the previous example of a 232GB hard disk, here's how you'd redo the partitions to create one partition for Mac OS X and another for Windows:

```
diskutil resizeVolume disk2s2 132G MS-DOS Windows 100G
```

You now have a 132GB journaled HFS+ partition (for Mac OS X), and a new 100GB FAT32 partition named Windows. Here's something to keep in mind: Windows ScanDisk, the Windows disk-checking and -repair utility, requires that you make the FAT32 partition no larger than 124.55GB. If you don't plan to use ScanDisk, don't worry about this limit.

Reassess Before You Resize If you want to split your Mac partition again, run `diskutil list` to make sure you know which identifier to use—the partition numbers have probably changed. To split the Mac partition from the previous example in two again, for example, you could run this command:

```
diskutil resizeVolume disk2s2 65G JHFS+ Part2 65G
```

You now have two Mac partitions and one FAT32 partition. You cannot resize FAT32 partitions with the `diskutil resizeVolume` command.

The Last Word

The `resizeVolume` command occasionally fails. If it encounters any disk problems, it will stop, and you'll need to run Disk Utility or another disk-maintenance program. If you have any system or special metadata files—which can't be moved—in the section of your partition that you wish to reallocate, the command will also fail. Unfortunately, the error messages won't go into any detail.

This new command is a work in progress and will probably see changes when OS X 10.5 arrives. In the meantime, with this tool at your disposal you can resize partitions on-the-fly, rather than having to copy data back and forth to an external drive. And you don't have to spend a dime to do it. □

Tip Before using this technique to resize the partitions on your drive, make sure you've backed up *everything*. It's all too easy to make a typo, and you can't undo the command line! (For backup tips, see "Better Mac Backups" at macworld.com/2437.)

KIRK McELHEARN is the author of many books, including *The Mac OS X Command Line: Unix under the Hood* (Sybex, 2004).

GEEK FAVORITES

Trick Out Your Desktop

If you're a weather fiend, you probably load your local radar map from Weather.com regularly. Wouldn't it be nice to have that map available—and automatically updated—all the time? With Tynsoe Projects' free **GeekTool** (macworld.com/2438), you can do just that. GeekTool is a preference pane that lets you display images, a text file's contents, or a Unix command's output in a window embedded in your desktop. You specify how often to update the data and control the size, border, position, and opacity of the window that displays your chosen content. If you're a Unix user, the possibilities are endless—you can, for instance, watch log files on your desktop in real time without ever opening Terminal.—ROB GRIFFITHS

One Geeky Gizmo Using GeekTool, you can embed the output of Unix commands, the contents of text files, or images from the Web directly on your desktop.

HELP DESK

macosxhints@macworld.com

Mac OS X Hints

The Insiders' Tips You Won't Get from Apple

Compare Shots in iPhoto

Tucked away in Apple's iPhoto '06 (part of the $79 iLife '06 suite) is a handy photo-comparison tool you might not know about. You can use this tool to compare similar shots side by side, so you can see which one you like best. Or if you're struggling to enhance an image, make a duplicate of the picture, try your adjustments on the photo, and then use this tool to compare it to the original.

It's a cinch to activate the comparison tool in iPhoto's full-screen mode. Select two or more images and press the Enter Full Screen button at the bottom left of the iPhoto window. The two pictures will appear side by side on a black background. To reveal a toolbar of image-correction tools, just move your cursor to the bottom of the screen.

Multitasker that I am, I don't like the way the full-screen mode blots out all my other application windows. No problem—there's another way to compare photos. Go to iPhoto: Preferences and set the Edit Photo pop-up menu to In Main Window. Now when you select two (or more) photos by ⌘-clicking on each one, and then double-click on one of the selected images, iPhoto will show your chosen images in one window, with the edit tools below them and a horizontal image browser on top (see "Subtle Differences"). (If you don't see the image browser, select View: Show Thumbnails.)

Subtle Differences
Using iPhoto's comparison mode, you can look at many images at once—making it easier to determine, for instance, which of a number of nearly identical images you'd like to keep.

WHAT'S ONLINE

> **Set Newer Portable Macs' Sleep Mode**
Learn how to control which type of sleep your laptop uses (applies to laptops made after fall 2005).
www.macworld.com/2441

> **Take Instant Photo Booth Snapshots**
Ditch the three-second delay and take a Photo Booth snapshot immediately.
www.macworld.com/2442

> **Capture Zoomed-in Screens**
Take screen captures of a zoomed-in screen.
www.macworld.com/2443

Whether you prefer comparing photos in the full-screen or default editing mode, there are some additional editing and comparison tricks you can use. First, say you've selected three images but then decide you'd like to replace the third image with a different one from your library. It's easy—click once on the third image and then click on the desired image from the image browser at the top of the window. Presto! The selected photo replaces the old one.

Hold down the ⌘ key and click on another image in the photo browser to add that image to your comparison group. If you had two photos before, now you have three. Repeat these steps as necessary, up to the limits of your screen size. You can now use the editing tools (Crop, Enhance, Red-Eye, Retouch, Effects, and Adjust) on each of the images in your comparison. To remove an image from the comparison area, simply ⌘-click on that photo in the photo browser again.

Automatically Add Spotlight Comments

Adding Spotlight Comments can help make Spotlight much more useful. Type descriptions into the Get Info window's Spotlight Comments field. (To access this field, select a file and press ⌘-I.) Use the comments to identify, for instance, the purpose of a given program ("image sorter and viewer") or to tag files and folders related to one project ("2007 site redesign"). One Spotlight search can find all files with the same comments, even if they're stored in different spots on your computer.

Install and Uninstall

New OS X users commonly ask this question: "How do I install and uninstall applications?" The answer depends on the program, but the good news is that both tasks are very easy to do.

Install It If you're installing software that came on a CD or DVD, insert the disc into your Mac. A Finder window will open showing the contents of the disc, and most commercial software will have some form of Read Me file or simple instructions visible in the disc's window. Usually all you'll need to do is drag a folder from the disc's window to the desired final location on your hard drive—typically the top-level Applications folder.

If you're installing a more-complex program—Adobe Photoshop CS, for example—you might need to double-click on an *installer* to start the process. Once this specialized program launches, follow its on-screen instructions. The installer will place all of the program's files in the right places.

Software you download from the Internet requires a few more steps. These programs are almost always compressed, so you'll need to double-click on the file to expand it. Most downloads will expand into something called a disk image, which uses the extension *.dmg*. This is like a virtual hard drive or a virtual CD, and is a convenient way to place a number of related files together for installation. Double-click on the disk-image file, and it will show up in the Finder just like another hard drive, CD, or DVD. Now you can drag the program you want to install out of the disk image's window onto your Applications folder. This is a critical step because you don't want to run the program from the disk image! Eject the disk image, and then trash the downloaded archive and disk-image file.

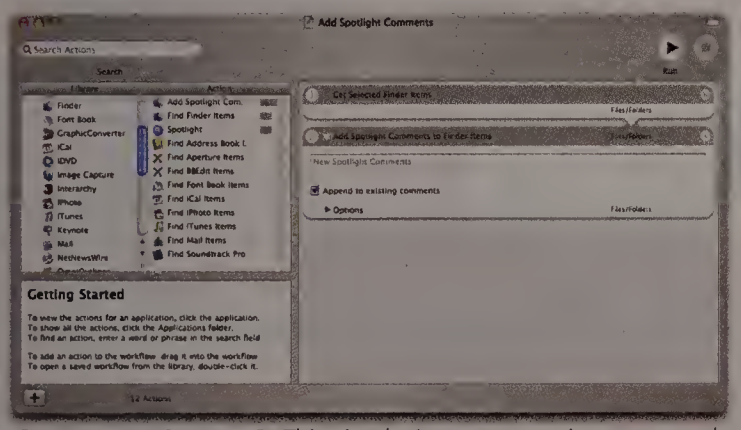
Uninstall It Installing Mac applications is clearly a piece of cake. But what about uninstalling them? For many Mac converts, this is one of those *ah* moments—uninstalling programs is very simple. Unlike the Window OSs, OS X has no strange *.dll* files or registry, and programs typically install everything they need to run within the application itself (excluding some settings files in your user folder). As a result, what is almost always a laborious process on a Windows PC is a very quick operation on a Mac.

To uninstall *most* programs on a Mac, go to the Applications folder. Drag the program's folder to the Trash and empty the Trash. That's it—you're done. Really. OK, it's true that there will still be some small bits related to the application left over. If you really want to make sure you get everything, look in *your user folder*/Library/Application Support for any references to the program. Also check in *your user folder*/Library/Preferences for the program's preferences. If you find something related to the uninstalled program, you can drag it to the Trash. But there's really no need to—the files you find won't cause any damage if they're simply left alone.

If you had to double-click on an installer to install a program, try rerunning the installer first. In most cases, after you launch it you'll see an uninstall option that will automatically remove all the program's files. Run this. If you don't see such an option, check the program's documentation or online help for uninstall instructions.

It's relatively easy to add comments to new files and folders as they're created, but what about the thousands of existing files and folders on your machine? When you have a bunch of files to tag with identical comments (such as the name of a client or project), use Apple's Automator (/Applications) to fill in the blanks.

Open Automator and click on Finder in the Library column. Select Get Selected Finder Items in the Action column and drag it into the workspace. Now click on Spotlight in the Library column and select Add Spotlight Comments To Finder Items in the Action column. Drag this action below the previous one in the workspace. Leave the Append To Existing Comments option selected. Click on the disclosure triangle next to Options and select the Show Action When Run option (see "Comments, Anyone?").



Comments, Anyone? This simple Automator action can greatly ease the process of tagging your documents with Spotlight comments, which offer a very useful way of finding files in a hurry.

Select File: Save As Plug-In. In the dialog box that appears, name your workflow `Add Spotlight Comments` and leave the Plug-in For pop-up menu set to Finder. Click on Save. To use your workflow, all you have to do is switch to the Finder and select any number of files and folders (using the shift or ⌘ key to make the multiple selections). Control-click on any of the selected files and choose Automator: Add Spotlight Comments from the contextual menu. A dialog box appears. Type the text you'd like to add and click on Continue. (If you've selected a folder, you'll notice that the comments apply only to the folder, not to the files inside it.)

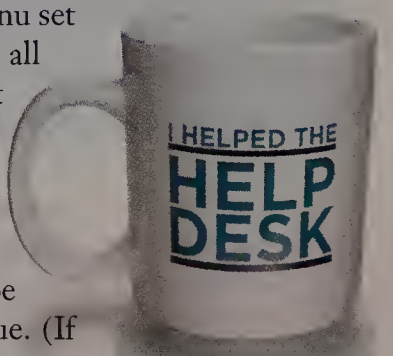
That's it. The workflow appends the specified text to each item's Spotlight Comments field. Once these files are tagged, you can use Spotlight to quickly zero in on exactly the files you're after.

Show Spotlight Results in Finder

One particular thing has really frustrated me about Spotlight: the Search Results window that drops down from the menu bar after you press the ⌘-spacebar shortcut. Selecting an item in the results list opens it, but there's no obvious way to show its location in the Finder. That's inconvenient in many circumstances—for instance, you might have multiple copies of a document saved on multiple disks, and you want to make sure that you open the proper one.

Turns out there's a simple solution: hold down the ⌘ key when you click on an entry in the Search

continues



Have a hint? Go to the Mac OS X Hints Web site (www.macosxhints.com) to share it. This column was based on tips from John Bailey, Haley Beaupre, Richard Vellinga, and anonymous contributors. Each month, the author of our favorite tip receives the *Help Desk* mug.

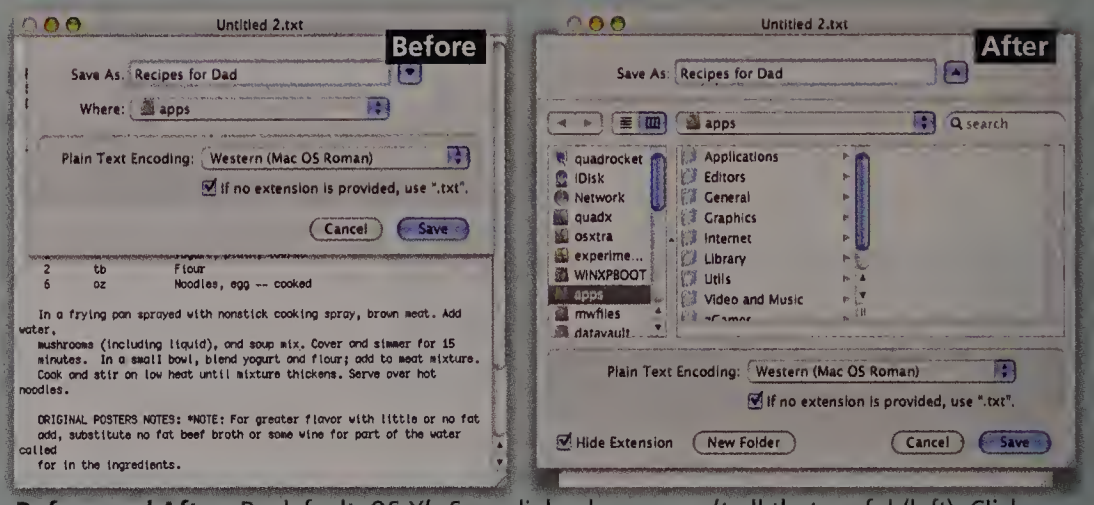
ICONS BY PAUL HOWALT; MUG PHOTOGRAPH BY PETER BELANGER

POWER TIP OF THE MONTH

Make Save Dialog Boxes More Useful

I find Mac OS X's default Save dialog box to be less than user friendly. It makes it appear as though you can save your file only to one of the places listed in the Where pop-up menu—but this short list of locations is basically useless. How often do you really want to save something to the top level of your hard drive?

The trick is to click on the unassuming triangle to the right of the Save As field. When you do so, your Save dialog box becomes a fully navigable Finder-like window (see "Before and After"). Here you can search, choose between list and column view, and even create a new folder to put your file in. If you prefer to see this expanded dialog box all the time, you can make it the default for all your applications in OS X 10.4.



Before and After By default, OS X's Save dialog boxes aren't all that useful (left). Click on the disclosure triangle, though, and you gain a much more powerful interface (right).

Launch Terminal (/Applications/Utilities) and enter this command (better yet, copy and paste it from macworld.com/2440):

```
defaults write -g NSNavPanelExpandedState
ForSaveMode -bool TRUE
```

(Do *not* break `NSNavPanelExpandedStateForSaveMode`—Unix commands don't always reproduce well in print.)

That's it—now all new applications you install will use the expanded Save and Save As dialog boxes by default. Keep in mind that OS X remembers your settings on a per-application basis. So if you've used the Save or Save As dialog box in one of your current applications and in so doing left it in the simple mode, you won't see the expanded Save or Save As dialog box even after having entered this command. To change that, the next time you use the app, click on the disclosure triangle to reveal the expanded dialog box before you quit.

If you decide that you prefer the simple dialog boxes, repeat the previous Unix command, but replace `TRUE` with `FALSE`.

Change the Save Default for All Users If you run a Mac lab, you may be excited to use this tip and, hopefully, reduce the number of support calls you get as a result. Unfortunately, the command I outlined applies only to the user who runs it—it's not global. If you'd like to change the global default for a Mac so that all users on the machine will see the expanded Save dialog box, enter this command in Terminal or, better still, copy and paste the command from macworld.com/2440 instead:

```
defaults write /Library/Preferences/
.GlobalPreferences NSNavPanelExpandedState
ForSaveMode -bool TRUE
```

As with the single-user version of the command above, you undo this one by repeating the command, replacing `TRUE` with `FALSE`.

Results window. A new Finder window will open to the folder containing the item you selected. This method won't work with Apple Mail and Microsoft Entourage messages, bookmarks, and Apple iCal events, but it seems to work just fine for everything else I tested—even Address Book contacts.

Make Sure Your Mailboxes Are Empty

If you don't like the thought of e-mail sitting around on your server, you can easily set up your POP e-mail accounts in Mail so that messages are removed from the server immediately after you get them. Go to Mail: Preferences; click on Accounts, then Advanced; and set the Remove Copy From Server After Retrieving A Message pop-up menu to Right Away.

But even after you make this setting change, you might still find old e-mail messages clogging up your mailbox. Glitches in the ether—an unstable connection to a mail server, or a problem with Mail itself—may occasionally prevent messages from getting deleted. A few stray messages won't cause problems, but a lot could eventually fill up your mailbox, especially if some of them contain large attachments.

You can see what's actually on your mail server by taking a look at Mail's Account Info window. To access this, control-click anywhere in your mailbox list and select Get Info from the contextual menu. If you have more than one e-mail account, you can choose between accounts via a pop-up menu at the top. Select a mailbox and then click on Show Messages. Any messages on the server, whether new or old, will show up in the list that appears. From here you can select individual messages, select multiple messages in a contiguous group by shift-clicking on them, or ⌘-click to select noncontiguous messages. To delete the selected messages, click on the Remove From Server button.

This trick can also come in handy when you're traveling and have only dial-up access. If you want to sift through your messages to delete the spam before downloading your e-mail, you can do so from this window. This will save you time and let you read just the valid e-mail messages. □

Senior Editor ROB GRIFFITHS runs the MacOSXHints.com Web site.
KIRK McELHEARN is the author of many books, including *The Mac OS X Command Line: Unix under the Hood* (Sybex, 2004).

ICON BY PAUL HOWALT

> take our survey

why? **Because we'd like to hear from fellow Mac users like you–and you might even win a new computer!**

Take our survey to join the Macworld Reader Panel and enter Macworld's 20-inch Intel 2 Core Duo iMac sweepstakes. By joining the panel you'll be periodically invited to participate in online research. And panelists get a chance to win every time they take part in a survey. Participation is open to all eligible Macworld readers 18 years old or over. Make a difference. Beginners, Experts, Switchers – let your voice be heard. We're listening.

where?
Simply log onto:

www.macworld.com/surveys/joinpanel/

when? **We need to hear from you by 4/30/07 in order to be included in the drawing.**

> maybe even win a new Mac!

Macworld

NO PURCHASE NECESSARY TO ENTER OR WIN. Void where prohibited by law. Drawing is open to all eligible Macworld readers who complete the survey and are 18 years old or over. We must hear from you by 4/30/2007 to be included in the drawing. Winner will be notified by email approximately three weeks after survey close, on or about 5/21/2007. For Official Rules, please visit www.macworld.com/surveys/panel/rules.cfm. All information provided will be kept completely confidential and only used in combination with other respondents. Personal information will not be sold, shared or used in any way outside the scope of this research. For more on privacy, visit www.macworld.com/surveys/panel/privacy.htm.

Mac 911

Solutions to Your Most Vexing Mac Problems

Sync Address Book without .Mac

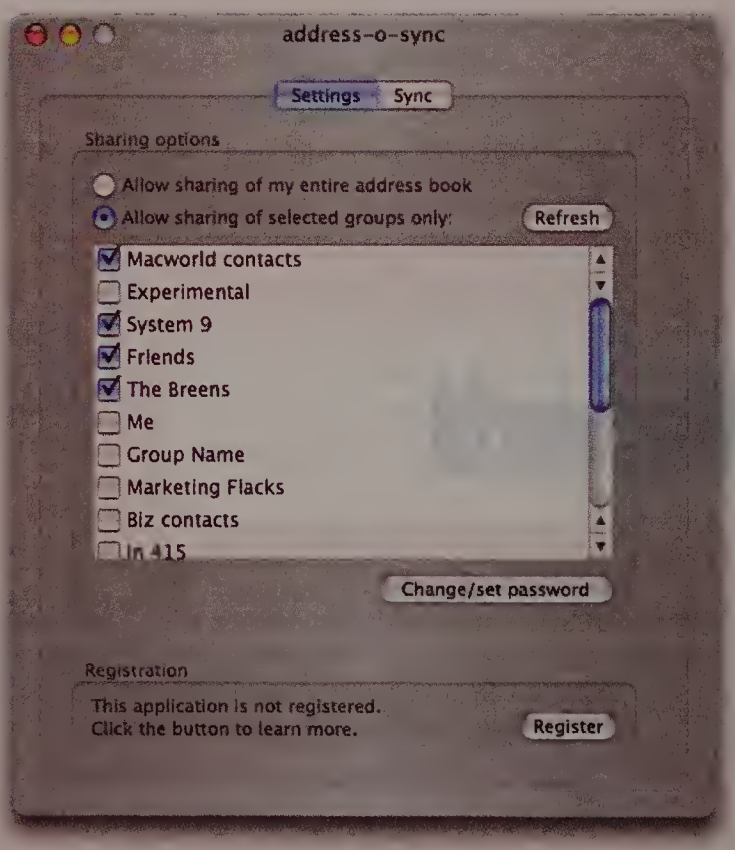
I use a Power Mac G5 at home and an iBook on the road. Both run OS X 10.4.7. Because I enter data in both machines, depending on where I am, I'd like to be able to synchronize my copies of Address Book. What do you recommend?

Via the Internet

The obvious answer is a .Mac account, with which you can synchronize Address Book contacts, as well as iCal calendars and Safari bookmarks. Because that data is synced over the Web, you can update it from anyplace with an Internet connection.

But .Mac isn't free, and I like free. If you do, too, I suggest you take a look at Stephan Kleinert and Markus Brand's free address-o-sync (www.slamslash.com/address-o-sync). This handy little utility—which must be installed on each Mac you want to synchronize contacts with—uses Apple's zero-configuration networking technology Bonjour to establish a sharing relationship between Macs on a local network. Fire up address-o-sync on each Mac, tell it what you'd like to sync (all contacts or just selected groups of contacts), and click on the button with the familiar swirly sync icon; then the utility will get to work (see "Staying in Sync"). If duplicate contacts in your copies of Address Book contain different information (perhaps you've updated a phone number or an e-mail address on one of your Macs but not on the other), you'll have the opportunity to choose which data to keep.

A Macworld.com forum member suggests another option: Plaxo (www.plaxo.com), a free Web-based service that lets you synchronize your contacts (via an Address Book plug-in) between multiple computers. Unlike address-o-sync, the free version of Plaxo won't merge and remove duplicate contacts; however, the $50-a-year Plaxo Premium will.



Staying in Sync
With address-o-sync, you can easily synchronize the Address Book contacts on multiple Macs on the same local network.

Find Missing iPhoto Pictures

Whenever I load new photos into iPhoto, I immediately put them into a new album for later viewing in iPhoto and for easier access from the Media Browser in iWeb and iMovie. Unfortunately, my wife doesn't do the same, so some of our photos seem to go missing. Is there an easy way to see which pictures have *not* been included in an album? If there is, I could use it to quickly sort my wife's pictures into albums.

Barrett Clark

Smart albums to the rescue! Just choose File: New Smart Album, create the condition Album Is Not Any, and click on OK. All pictures that don't belong to any album will appear in the resulting smart album (see "Only the Lonely"). But be warned: Because smart albums update themselves, pictures in this Not Any album will disappear if they're sorted into another album.

Fix Fonts in TextEdit

When I type something in TextEdit and print it (no matter what font size I choose) the text prints in extremely small type. The same problem sometimes happens when I print from Safari. What's going on and how do I fix it?

Shane Saylor

In TextEdit, this is intentional. By default, TextEdit bases text wrapping on how wide the document window is on screen. To see this in action, type a couple of long sentences and then drag the bottom right corner of the TextEdit window to make it narrower. The text should rewrap itself to fit in the window. If you print this document, that printout will match what's on screen, down to where the words wrap. If you put a mess of text on a single line, TextEdit will automatically decrease the font size on the printout so all the text fits on that one line.

This is useful if you're entering lines of code and need those lines to print without breaking. But it's

not so hot if you're using TextEdit as a word processor rather than a text editor. Fortunately, you can change TextEdit's line-wrapping behavior by choosing Format: Wrap To Page. When you do, the text will wrap to the size of the page specified in Page Setup (File: Page Setup), and fonts will print at the chosen size. (If you'd like TextEdit to always behave this way, choose TextEdit: Preferences and enable the Wrap To Page option in the New Document pane.)

As for Safari, you can increase the size of printed text by increasing the size of the browser's text on your Mac's screen. Just press ⌘–equal sign (=) to increase text size or ⌘-hyphen (-) to decrease it. Your printouts will mimic what you see on screen.

Ethernet and AirPort

Is it possible to hook up an Ethernet switch to an Apple AirPort Extreme Base Station in order to connect more than one computer with an Ethernet cable? Will the router in the base station assign an IP address to each of the wired computers?

Stuart Landay

Sure—that's one reason Apple included the Ethernet LAN port on the back of the base station. To get the full lowdown on how to set this up, I strongly suggest that you download Apple's very helpful Designing AirPort Extreme Networks PDF document (macworld.com/2427).

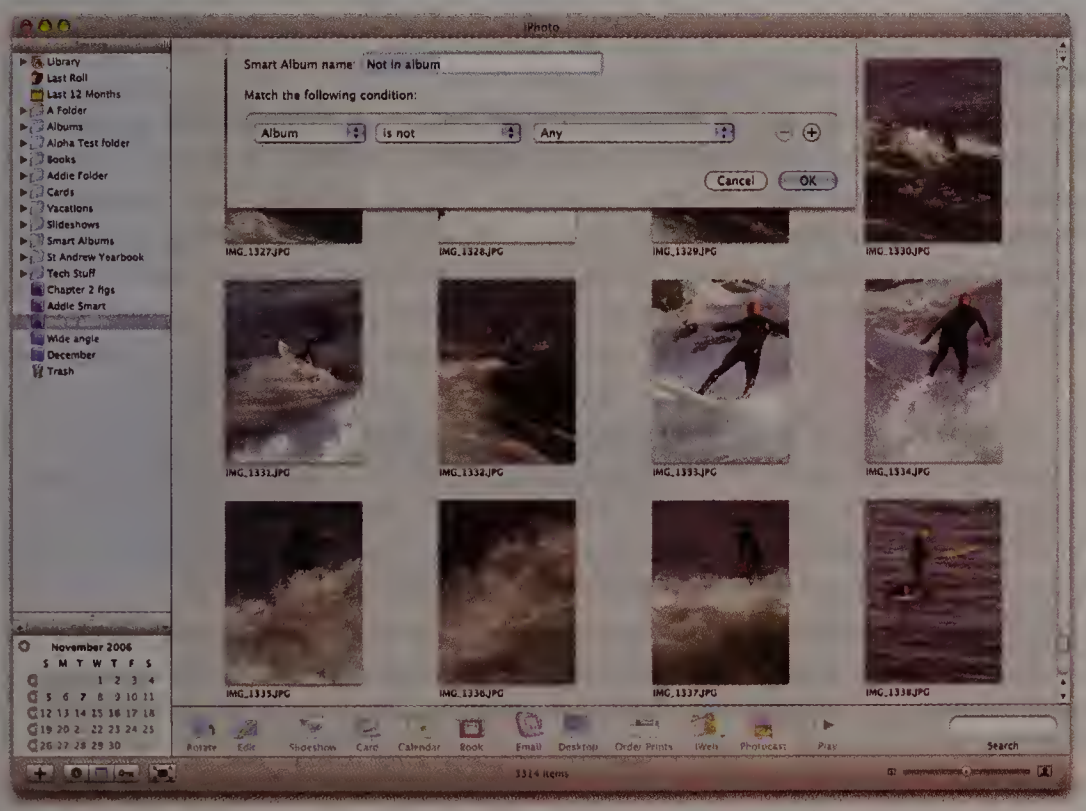
For those of you who are averse to reading documentation, the basic idea is this:

String an Ethernet cable between your DSL or cable modem and the base station's Ethernet (WAN) port. Run another Ethernet cable between the base station's Ethernet (LAN) port and one of the ports on the switch. String yet more cable between the switch and the computers you want to connect.

Run the AirPort Setup Assistant (in /Applications/Utilities). If the answers you provide work, great. If not, launch the AirPort Admin Utility (also located in the Utilities folder), select the base station, and click on Continue. In the Internet tab, choose Connect Using Ethernet, and then, from the Configure pop-up menu, choose either Using DHCP or Manually, depending on your circumstances. If you have a dynamic IP address, you'll pick Using DHCP. If you have a fixed address, you need to configure things manually, entering that IP address as well as the subnet mask, router address, and DNS servers in the appropriate fields.

As for assigning IP addresses to your computers, that magic happens in the Network tab. Enable the Distribute IP Addresses option and choose either Share A Single IP Address (Using DHCP And NAT) or Share A Range Of IP Addresses (Using Only DHCP). If you choose the

continues

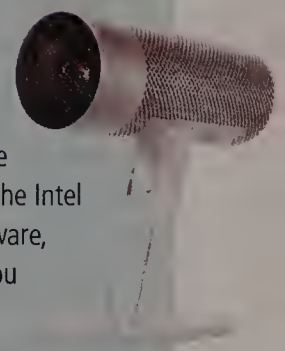


Only the Lonely Using a smart album, you can easily identify which iPhoto pictures you haven't yet placed in albums.

ICON BY PAUL HOWALT; MUG PHOTOGRAPH BY PETER BELANGER

TIP OF THE MONTH

Copy Documents with an iSight

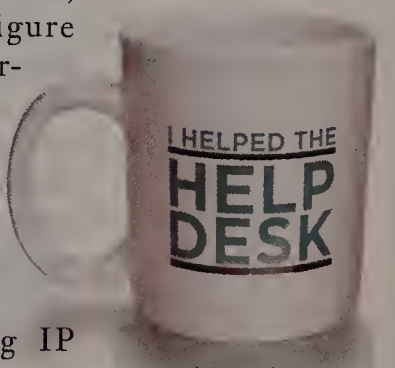


"To get the $100 rebate, you must include the product's UPC label or a photocopy." "We'll need a copy of your insurance card before we can process that claim." "Do you have a copy of your receipt?" What do you do when you need to provide some sort of documentation but don't have access to a photocopier or a fax machine? The built-in iSight camera on the Intel iMac, MacBook Pro, and MacBook, along with Apple's Photo Booth software, could be the solution. Because the iSight has a very short focal length, you can stick a document or any other official object a couple of inches in front of it and get a nice, sharp picture of it.

To do so, open Photo Booth. Don't select any effects. Hold your object—box, document, business card, or whatever—up to the camera. Move it as close or as far away as you need; the iSight will quickly put it in focus. (Don't worry if you're trying to capture text and it reads backward on screen; you can take care of that later.) Hold your object steady by resting your elbow(s) on the table, and click on the Camera button to begin the three-second countdown.

Once the picture is taken, drag it to your desktop from Photo Booth's tray. You'll see that it's a JPEG file. If you aren't trying to capture text, you can use that JPEG as is. If you are trying to capture text, double-click on the image to open Preview, select Tools: Flip Horizontal, crop as needed, and save the file.

Jay Lindell



Send your tips to mac911@macworld.com. If we publish yours, you'll receive this dandy mug. All published submissions become the sole property of *Macworld*.

TOOLS OF THE TRADE

Migrating to a New Mac

Now that Apple has completed its transition to Intel processors, a lot of Mac users are thinking about replacing their old PowerPC machines. Here are tools and tips that will make the job easier.

FireWire Cable When you first fire up a new Mac, Apple's Migration Assistant (found in /Applications/Utilities) will help you move your data, but it'll demand a FireWire cable to do so.

External FireWire Enclosure You have multiple IDE hard drives in your old Power Mac, yet your new Mac Pro works only with SATA drives. What to do with those old drives? Consider sticking them into FireWire hard-drive enclosures. Just slip an old drive into the enclosure, and you've got an external hard drive. Enclosures with Oxford 911 and 912 chip sets (which let your Mac boot from those drives) run from $50 to $80 and are available from vendors such as FirewireDirect.com and Other World Computing (eshop.macsales.com). Note that if you put your old Mac's boot drive into an enclosure, it won't boot your new Mac until you install an Intel-compatible version of OS X.

Drive Adapter FireWire enclosure too rich for your blood? Or maybe you need to connect your old drives to your new Mac only for a short time? Newer Technology makes a $25 USB 2.0 Universal Drive Adapter (www.newertech.com)—a couple of cables that let you connect an IDE or SATA device directly to your new Mac via the Mac's USB 2.0 port.

Serial Numbers As efficient as Apple's Migration Assistant is about moving your applications from Mac A to Mac B, sometimes it misses some of the files that authorize you to use those apps. So just in case, make a note of all your applications' serial numbers.

first option, the base station will dynamically serve, by default, IP addresses within the range 10.0.1.2 to 10.0.1.200. The second option lets you define the specific range of IP addresses if that's what you want.

Now you need to configure the computers you're connecting to that switch. If you've decided to share a single IP address, open the Network preference pane on each computer, choose Built-in Ethernet, click on the TCP/IP tab, and choose Using DHCP from the Configure IPv4 pop-up menu. The computers will then grab dynamic IP addresses as needed from the base station via the switch. If you're sharing a range of addresses, choose Manually from the Configure IPv4 menu and assign a specific address within the range you specified in the AirPort Admin Utility. You'll also want to enter `255.255.255.0` in the Subnet Mask field, `10.0.1.1` in the Router field, and the address(es) of your DNS server(s).

Run Windows Safely

My wife just purchased a new iMac. She uses OS X about 90 percent of the time but also uses Parallels Desktop to boot into Windows for a few work tasks that require it. My wife never uses a browser on the Windows side, but the computer is connected to the Internet 24-7. Is Windows still vulnerable to viruses and spyware in this situation? What protection do you recommend?

Christopher Hosford

Yes, Windows is still vulnerable. To prove it, try this: Without running your browser or your e-mail application, perform some normal tasks on your Mac and keep an eye on your DSL or cable modem's activity light. That blinking indicates that your computer is conversing with the Net, even if you aren't browsing the Web or exchanging e-mail. Furthermore, while your wife may swear she'll never launch a browser while running Windows, there'll likely come a time when she'll need to check something online and won't switch back to OS X to do it. Finally, your mention of your wife's work tasks should set off alarms. Where do these files come from, and how are they shared? A burned CD can carry a virus just as easily as an e-mail attachment.

The point is that Windows on a Mac is still Windows, which means that it's still vulnerable to all the same cooties that can plague PCs. With that in mind, if you're using Parallels Desktop, you need to behave like a regular Windows user and take precautions. Fortunately, doing so need not cost you a nickel. I have a living, breathing Windows PC sitting next to my Mac, and I've protected it for next to nothing.

Although you can buy firewall software with more bells and whistles, the free version of Zone Labs' ZoneAlarm (www.zonelabs.com) is an easy way to block incoming threats. I rarely use a Web browser on my PC, but ZoneAlarm has logged more than 105,000 attempts to access my computer (granted, the majority of them were innocent). It also alerts you when applications or utilities try to make Internet connections and asks you for permission before it'll let them do so.

As for viruses, I used to run the Windows version of Symantec's Norton SystemWorks on my PC, but I let the subscription lapse because there are enough free alternatives. The one I chose was Grisoft's AVG Anti-Virus (www.grisoft.com). If you choose a free program, you won't get virus updates as fast as you would with a product you paid for, and you won't be able to tweak settings as much. But for my limited Windows use, it's plenty good enough.

For dealing with spyware, I take yet another cheapskate route: Lavasoft's free Ad-Aware SE Personal (www.lavasoft.com). It works only after the fact—that is, after the spyware or adware has infected your system and you want to get rid of it. The for-pay options—Webroot's $30 Spy Sweeper (www.webroot.com), for example—can block spyware and adware before they have a chance to touch your computer. □

Senior Editor CHRISTOPHER BREEN is the author of *The iPod and iTunes Pocket Guide*, second edition (Peachpit Press, 2006).

ICON BY PAUL HOWALT

As seen in the Apple Developer Connection Pavilion

Macworld Conference & Expo 2007

2° data solutions

2 degrees frost

AoE Storage For Mac

New storage for Mac – ATA-over-Ethernet (AoE) Mac EtherDrive® storage Solution Bundles for fast, lower-cost, scalable shared network attached RAiD storage that's easy to use.

www.2degreesfrost.com

4G

ColorBender technology

ColorBender eliminates clipping, so images look better. Processing digital images has never been easier, faster or more intuitive. Let us prove it to you.

www.4gcolor.com

AppZapper

AppZapper allows you to confidently uninstall virtually any application as easily as it was installed. Drag one or more apps onto AppZapper and it finds extra files and lets you review, then trash. The developers just introduced Disco, the sub $30 media burning app for the rest of us.

www.appzapper.com

ArtRage 2

ArtRage 2

Simple, stylish, powerful painting with natural tools in a creative environment. Paint with oils, sketching pencils, or sprinkle glitter. imports Photoshop PSDs and layer blending.

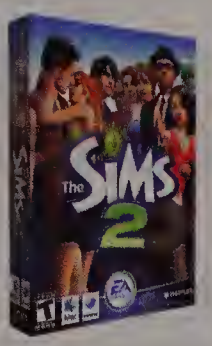
www.artrage.com/artrage.html

ARCHIWARE

PresSTORE®

PresSTORE is a cutting-edge data-management-system for the backup, distribution and archiving of data, which offers more security, efficient storage and an optimal engagement of resources.

www.archiware.com



Apple Design Award Winner

aspyr™

The Sims™ 2

With the introduction of genetics, you can control your Sims over a lifetime and pass their Sims' DNA down generations. What will you make of their lives?

www.aspyr.com

Apple Design Award Winner

AUTOMATED WORKFLOWS

Workflow Automation

increase productivity! Automated Workflows, LLC offers Automator actions for inDesign, Photoshop, QuarkXPress, and more. Custom AppleScript, Automator, and workflow automation development services are also available.

www.automatedworkflows.com

CLIENTS & PROFITS®

CLIENTS & PROFITS X

Clients & Profits is award-winning job tracking and accounting software for advertising agencies, design studios, and marcom departments — it's the best-selling agency management system for Mac and Windows. Call (800) 272-4488

www.cnp-x.com/macworld

As seen in the Apple Developer Connection Pavilion

Macworld Conference & Expo 2007

CRASHPLAN

Backup Automagically!

The easiest, most reliable, and smartest off-site backup software on earth. Fairy dust sold separately.

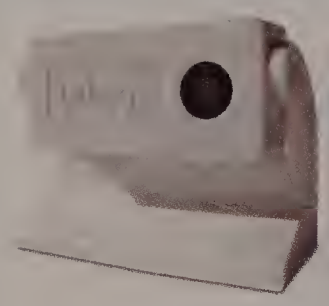
www.crashplan.com

digital film tools

EZ Mask

EZ Mask is an easy to use masking tool capable of extracting almost any object even if it has fine hair detail, smoke, or reflections.

www.digitalfilmtools.com

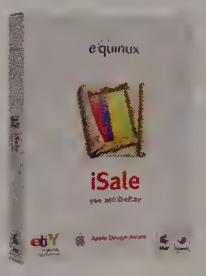


ecamm network
dream the connection

iMage USB Webcam

Deliver high-quality video to your favorite Mac applications. iMage is the perfect webcam for every Mac user in your family. Experience video chat!

www.ecamm.com



Apple Design Award Winner

e·quinux

Best eBay solution for Mac

iSale, the two-time Apple Design Award winner and ultimate, eBay-certified application, allows you to easily style and manage your auctions on eBay. Experience iSale's user-friendly interface and choose among a variety of integrated template layouts to boost your sales.

www.equinux.com

e-cinder

Morphing back on Mac

Morph Age is your best choice for morphing faces or any objects and save it as a QuickTime movie. Works in realtime, has pro-features, and supports the latest technologies of Mac OS X.

www.eX-cinder.com

Flying Chao, Inc.

Euphoria WITHOUT drugs

Sleep.. mellow.. chill & relax naturally. Create binaural beats to enhance your moods, from emotional arousal to a state of ecstasy. "Tibetan meditation in software." iPod'able.

www.flyingchao.com

Flip4Mac®

Episode™ Media Encoding

Powerful desktop media encoding applications for the Mac, offering the highest quality and fastest encoding for content repurposing and distribution to new media channels.

www.flip4mac.com

Apple Design Award Winner

Freeverse Software

Lineform is a completely new drawing program. Winner of a 2006 Apple Design Award, it is the ideal tool for vector based diagrams and illustrations.

www.freeverse.com

As seen in the Apple Developer Connection Pavilion

Macworld Conference & Expo 2007

gvs

GVS9000VTR

Dual SDi Digital Field Capture • Record • Play • Edit
2K • HD • 4:4:4 • 4:2:2 • DVC Pro HD • DV with QuickTime Native
2-50 hours uncompressed HD portable SAN storage.

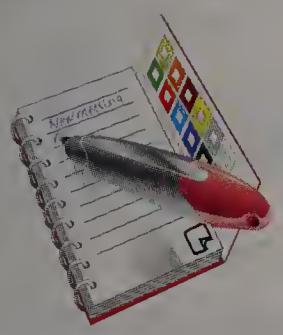
www.GVSF.com

HELIOS

HELIOS Software GmbH

HELiOS WebShare provides highly secure file transfer and management via Web browser. PDF HandShake, imageServer and PrintPreview deliver advanced PDF, image conversion, and proofing solutions.

www.helios.com



Penit® BY HITACHI MAXELL

iNote for Pen-it

iNote for Pen-it is designed for use with Maxell digital pens. iNote allows you to work freely with pen and paper, and captures your pen strokes digitally.

www.pen-it.com

imeem

the best of social media.

imeem for Mac

imeem is the leading next-generation online network for social media, combining social networking with innovative user-generated content features and instant messaging.

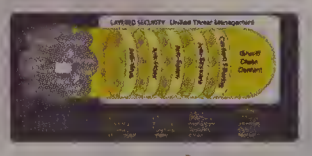
imeem.com

intel

Intel® Software Development Products

Intel® software development products help software developers deliver improved performance for their applications running on the new Apple iMac and MacBook Pro platforms based on Intel® processors. These products provide a fast and easy way to get maximum application performance and integrate with the Xcode* development environment.

www.intel.com/software/products



iSheriff™ ENTERPRISE CONTENT SECURITY

Unified Threat Management

We were founded in 1999 to combat the emerging enterprise content security threats. The unique scable. effecient architecture, with the patented Content Classification Engine, delivers superior real time protection to a small school or an entire nation. Policies for content secuirty, bandwith security, email threats, legal liability, and network security compliance are easily developed and enforced with full reporting.

www.isheriff.com

Apple Design Award Winner

inventive

iClip lite

iClip lite is a free Dashboard widget version of the award-winning iClip. it's a multiple clipboard & scrapbook utility featuring stylish graphics and animation.

www.inventive.us

KBOX BY KACE

KBOX™ - Automate IT Mgt

KBOX™ from KACE provides centralized management and provisioning of systems, applications, and files. Manage systems including: software/hardware inventory, software distribution, help desk, and alerts.

www.kace.com/macworld

As seen in the Apple Developer Connection Pavilion

Macworld Conference & Expo 2007

KINEMAC

KINEMAC

Kinemac is a 3D Real Time Animation Software for MacOSX to create professional 3D Animations running in real time or to export to QTmovies.

www.kinemac.com

LANDesk®
An Avocent® Company

LANDesk® Solutions

Discover managing your systems running Mac OS, Windows and more from a single console. Discover cost-effective, intelligent systems and security management solutions from LANDesk.

www.landesk.com

LANrev

LANrev

Comprehensive, automated client management solution for deploying software and patches, hardware and software asset management, remote configuration, license compliance and imaging, in heterogeneous environments.

www.lanrev.com

lithium Corp.

LITHIUM|Console

Network, server and appliance monitoring platform. LITHIUM|Console delivers intensive device monitoring, deployment modelling and visualisation, fault investigation, data analysis and an integrated trouble ticket system.

www.lithiumcorp.com

Apple Design Award Winner

Luxology™
modo 202

modo is the artist-friendly 3D modeling, painting and rendering software with award-winning features and workflow. For graphic artists and designers. 30 day free evaluation download.

www.modo3D.com

mac bak

Backup Made for Mac

Designed and built for Macs, MacBak is a simple, automated and reliable service that allows you to do the creative work that you do best.

www.macbak.com

Apple Design Award Winner

macromates
TextMate

TextMate is an award winning text editor / productivity tool with out of the box support for LaTeX, HTML, Ruby, Objective-C/C++ and much more.

www.macromates.com

MACTANK

Answer email faster, with better accuracy, and help more customers using MailTank. Premium web hosting, email and collaboration products for dedicated Mac users. Free Trials!

www.mailtank.com

As seen in the Apple Developer Connection Pavilion

Macworld Conference & Expo 2007

Apple Design Award Winner

mekentosj.com

Mac Researcher?

Checkout mekentosj.com for the award-winning programs EnzymeX and 4Peaks, and MacResearch.org, the online community and resource for MacOSX in science.

www.mekentosj.com/macworld

NetTeam Server

NetTeam Server is a workflow, content management, collaboration and social networking web app for businesses of any size. Standard functions support Process, Content and Community applications.

www.netteamserver.com

newertechnology

miniStack™ V2 Enclosure

Up to 750GB disk space and powered FireWire and USB2 hubs – the perfect external storage/connectivity solution. Works with ANY USB2/FireWire equipped computer. 6.5" x 6.5" x 1.5" size cuts desk/cord clutter. Macworld Top Rated. Prices start at $74.95. Call 815-308-7001

www.NewerTech.com

onOne software

Photoshop Plug-Ins

The Photoshop Plug-In Suite includes plug-ins for resizing, masking, color correction and border effects that are designed to help get you back behind the camera.

www.onOnesoftware.com

ProfCast

humbledaisy

"ProfCast is the all in one enhanced podcast creation tool. It's as simple as Launch, Load, and Lecture!"

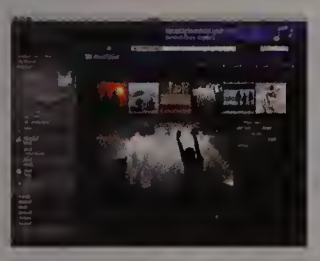
www.profcast.com

pzizz

pzizz 2.0

Relax, de-stress and re-energize during the day...
Enjoy deep, restorative sleep at night...
pzizz - energy for life!

www.pzizz.com



qnext

Qnext

Qnext lets you easily and instantly communicate and broadcast unlimited digital content with anyone on the popular Instant Messenger and Email networks.

www.qnext.com

Softquik
Software I Can Use

SOHO-One-Stop

Finally, affordable Mac business software. The one-stop for the small business; Contacts, Mailing list, Inventory, Invoicing, Purchase & Sales ledgers, HR, Time & Billing in a single package.

www.softquik.com

As seen in the Apple Developer Connection Pavilion

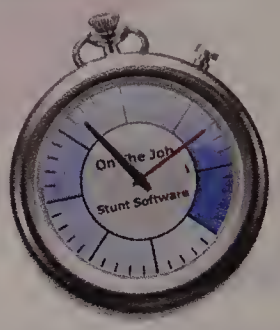
Macworld Conference & Expo 2007

Storyist® Software

Storyist®

introducing Storyist®—a powerful tool for fiction writers. Have a story to tell? Storylst can help you develop, edit, and publish it!

www.storyist.com

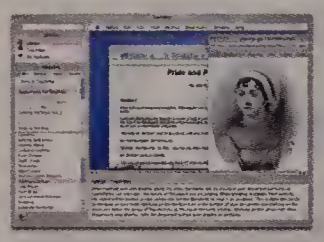


Stunt software

On The Job

A simple yet powerful time tracking and involcing solution designed to help you get off the job more quickly. Download a free demo at our webslte.

www.stuntsoftware.com



TeachMac

Customizable multimedia tutorials built by Mac users for Mom, yourself, and the switcher next door. Who's the student? Who's the teacher? With TeachMac, you are.

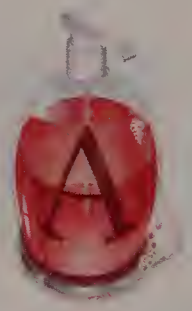
www.teachmac.com

TROLL TOUCH
TOUCHSCREENS

Troll Touch

Troll Touch is the recognized leader in internally integrated touchscreen systems for Apple computer products. Our method of touchscreen manufacturing provides for activation with any type of stylus. This could be a fingertip, pencil point, eraser, gloved hand or non-sharp pointer.

www.trolltouch.com



unmarked software

TextSoap 5

intelligent text cleaning. Clean messy emails, websites, and other text littered with odd characters, hard returns, quote marks, extra spaces, and other junk.

www.textsoap.com

X2 studios™

checkBox™ 2 for Mac

checkBox™ 2 is a versatile enterprise-level print accounting solution that will enable your organization to easily track printing and recover costs.

www.x2studios.com

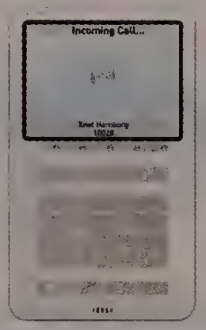
xeric design

a software development company

EarthDesk 4.0

Your desktop is your world, so put the world on your desktop. EarthDesk displays current sun, moon and city illumination plus real-time global cloud coverage.

www.xericdesign.com



Talk without Limits

Megafon is an easy to use internet phone (VoIP) for Mac OS X providing crystal clear voice quality in an attractive interface.

www.call4mac.com

Think Host Adapters
Think ATTO

SCSI • Fibre Channel • SAS

Industry's Most-Trusted RAID & Host Adapters

First to Support Mac on Intel

ATTO

ATTO Technology, Inc. | Power Behind the Storage

For information contact ATTO:

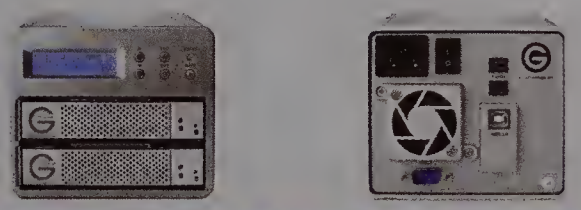
www.attotech.com/mac.html

or call 716.691.1999

Meet G-SAFE

Fail-Safe Storage Solutions for Digital Photographers

- Automatically **mirrors** your images to (2) independent drives
- Hardware **RAID 1** controller provides full-time data protection
- **FireWire 800 and USB 2.0** ports for universal connectivity
- Storage capacities up to **1TB** in a compact form factor
- Hot-swappable 7200 RPM **SATA II** drives with up 32MB cache
- **Front panel LCD** for system configuration and monitoring
- Removable cooling fan and **2-year factory warranty**



www.g-technology.com

FEED YOUR APPLE!

Increased Performance with TechWorks Memory Upgrades

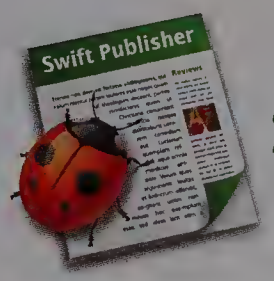
Byte Me TECHWORKS

TechWorks memory by Buffalo Technology has been a leading memory upgrade solution for Apple computers since 1986, and was the first memory to include a lifetime warranty. Buffalo manufactures TechWorks modules to surpass Apple's specifications and guarantees that they are 100% compatible with Apple computers.

OWC UNITEK Newegg BUFFALO™

STORAGE WIRELESS MULTIMEDIA [MEMORY]

Buffalo Technology (USA), Inc., Buffalo Technology, Buffalo logo, Byte Me logo, and the TechWorks name are trademarks or registered trademarks of Buffalo Technology (Buffalo) Inc. The names and logos of other companies mentioned herein belong to their respective owners.



NEW v. 2

Swift Publisher

Page layout tool to create Flyers, Newsletters, Brochures and more.

Macworld ★★★★ | macHOME APP OF THE MONTH | MacAddict RATED GREAT | MacDirectory ★★★★

Major additions:

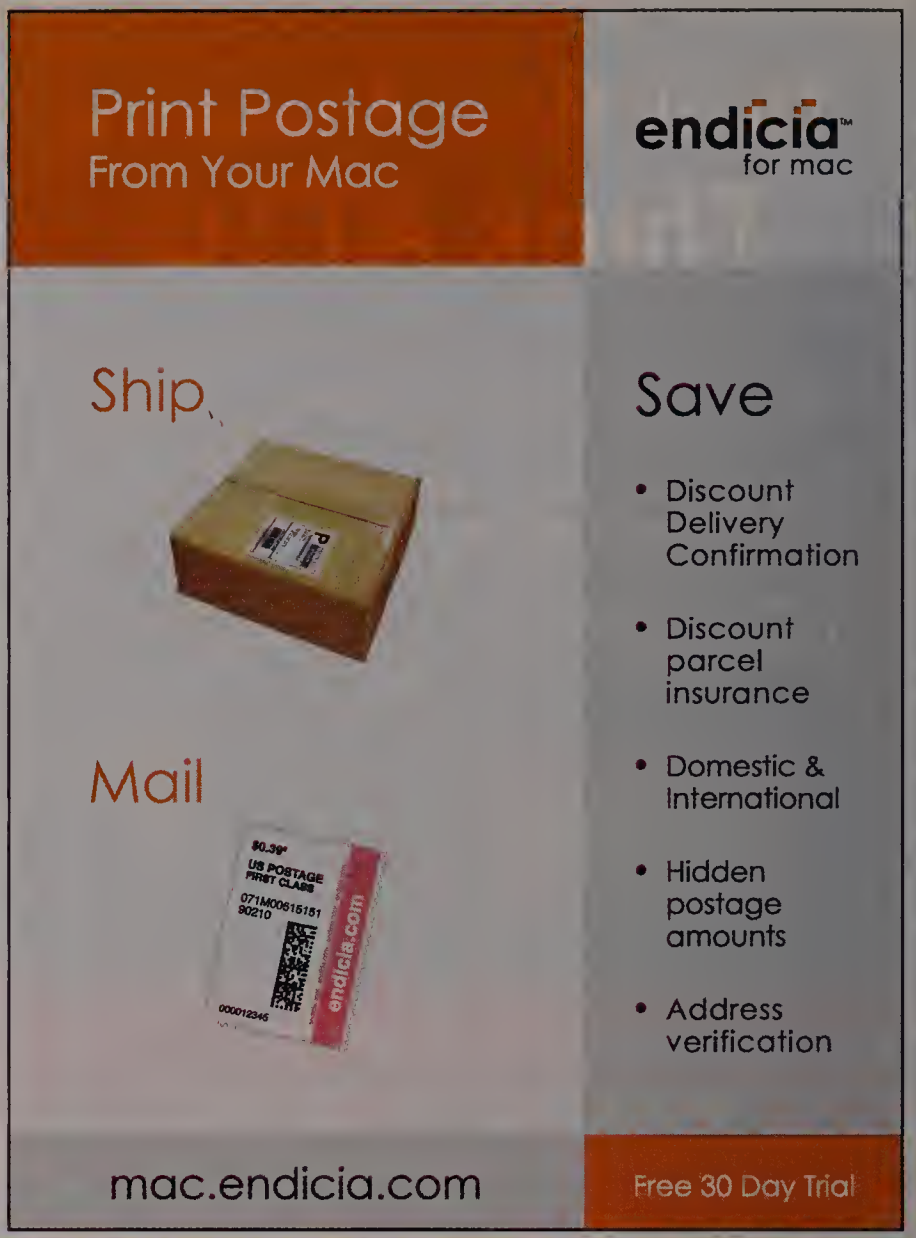
- Master pages option
- Tables support (cells can contain text and graphics)
- Imposition option: arrange brochure pages automatically
- Page Panel to preview and manage pages
- Convert Text to Curve option

BeLight SOFTWARE

Get your fully functional trial at:

www.belightsoft.com

protected
WITH
care™
shieldzone.com
INVISIBLE SHIELD™
Full-body protection for your iPod and more...


Print Postage
From Your Mac
endicia™
for mac
Ship
Mail
Save
• Discount Delivery Confirmation
• Discount parcel insurance
• Domestic & International
• Hidden postage amounts
• Address verification
mac.endicia.com
Free 30 Day Trial

VisibleDust
Sensor Cleaning Swab™
Arctic Butterfly®
"Since we first discovered VisibleDust's charged brush cleaning approach, back in mid-2004, it has become THE way we clean the sensor cover glass inside digital SLR cameras. Why? Because it works better than any other method we've tried..."
Rob Galbraith
robgalbraith.com
12 Swabs/Pack
Sensor Cleaning Swab™
"The most affordable streak free swabs on the market."
Patented
Mini-Channels
Green Series Sensor Cleaning swabs™ are compatible with:
Sensor Clean™ Smear Away™, and VDust™ Plus
Orange Series Sensor Cleaning Swabs™ are compatible with:
VDust™ Plus, Smear Away™ and Eclipse.
VisibleDust Products are Protected by US and International Patents and Trade Marks
Visit the most educationaly comprehensive website on the science of DSLR sensor claaning:
WWW.SENSORCLEANING.COM
VisibleDust.com

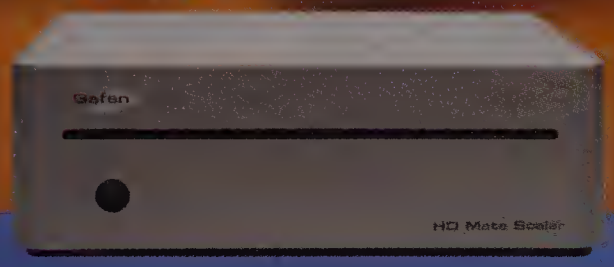
No more fumbling!
Keep your devices securely on the dash
• Clip on in seconds
• No interior damage
• Neat and discreet design
• No expensive installation
• No dashboard dismantling
• A variety of mount locations
10% OFF
advantage code (ac#)
"15502"
Order your mounting solution now at
ProClip
www.proclipusa.com

Stretch It. Switch It. Split It. Gefen's Got It.

Gefen

Connect Xbox 360 & PS3 game consoles to any Apple Cinema Display.

HD Mate Scaler



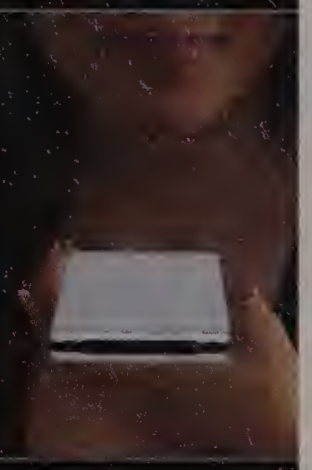
- Interface multiple HDTV sources including Apple Cinema Displays
- Connect HDTV sources with component video or DVI outputs and digital display
- Supports HD resolutions up to 1920 x 1200 and 1080p
- IR remote control
- SD and HD content can be viewed in High Definition with multiple viewing modes available at the touch of a button
- Switch between two component and one DVI input
- Saves space on your desktop

www.gefen.com
1-800-545-6900

rocstor

ROCBIT Secure Encrypted Mobile Drives

Macworld 2006



USB, FireWire 400 or FireWire 800
Patented Anti-Shock Protection
Real-Time Hardware Encryption
40, 128 or 192-Bit Encryption
Up to 160GB Capacities (Portable)
Mac or PC

ROCPRO Desktop External Hard Drives

Built-in Power Supply
No Fans - No Noise
FREE Carrying Case ($29)
80GB to 750GB Capacities
Single Drives - 16 MG Cache
FireWire 800/400/USB

ROCPRO 300
eSATA/FW800/400/USB

ROCSECURE.com
secure your future

Available through APPLE Dealers & eRetailers

ROCSTOR.com
store your future

Massive Storage for your Desktop

Roll Your Own SATA RAID !

Fast, Affordable, Secure, Hot-Swappable Serial ATA Solutions

For Mac Pro, MacBook Pro and PowerMac

SeriTek eSATA Enclosures

- Virtually Unlimited Storage
- Transfer up to 300MB/s
- Interchangeable Trays
- Quality Aluminum
- Easy to Operate
- Hot-Swappable
- Ultra-Quiet
- Portable

Extreme Storage Portability for Your MacBook Pro

Reliable Storage Solutions

- HD/SD Digital Video Creation, Editing, Storage and Playback
- Digital Audio/Music Composition, Recording
- Digital Photography/Illustrations
- High-End Workstations
- Computer Animation
- Game Development
- Scientific Research
- Broadcast Video
- Graphic Arts
- Engineering
- Servers

FirmTek

FirmTek, LLC
Tel +1-510-675-9800
Fax +1-510-315-3077
sales@firmtek.com
www.firmtek.com

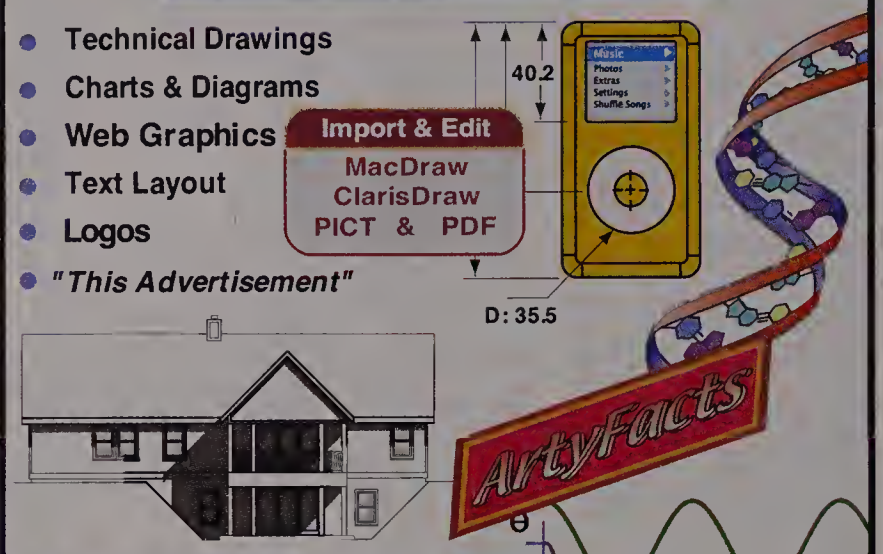
SERIAL ATA
ExpressCard
PCI EXPRESS
PCI-X

Eazy Draw®

Make Drawing Fun on OS X

- Technical Drawings
- Charts & Diagrams
- Web Graphics
- Text Layout
- Logos
- *"This Advertisement"*

Import & Edit
MacDraw
ClarisDraw
PICT & PDF



New 350 page printed user manual now available.

http://www.eazydraw.com

ph: 608.444.5245

fax: 608.635.2124

Mac Universal

© 2006 EazyDraw, a Dekorra Optics LLC enterprise. All rights reserved. EazyDraw is a registered trademark of Dekorra Optics, LLC. Mac and Built for OS X are trademarks of Apple Computer, Inc.

iListen

Speech Recognition for Mac OS X

MacSpeech

Dictate into all your applications.
(yes, we do mean all of them!)

Fast setup and training
Start dictating in 5 mins.

Macworld ★★★★☆

"astonishingly good software",
iOnMac.com

"iListen 1.7 Rocks",
Charles Moore, Applelinks.com

Buy now at www.macspeech.com
or from all fine Apple Resellers including:

Apple Stores · Office DEPOT · TEKSERVE · Fry's ELECTRONICS · MICRO CENTER · J&R

"With what it takes to acquire successful footage... flesh is all that you can afford to lose."

Arthur C. Smith III

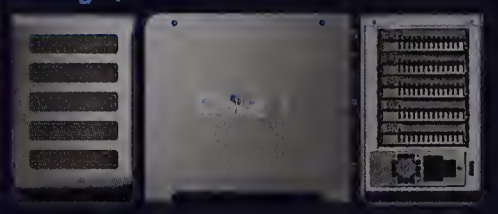
Arthur Smith is an independent filmmaker working on projects with National Geographic Magazine, undertaking the task of filming Polar Bears in Barter Island. As a photographer, Arthur Smith lives in the moment.
"The ability to capture the moment becomes an invisible requisite, the ability to share that moment with the world is the Holy Grail."

As a necessity to Arthur Smith's work flow, he uses CalDigit's S2VR HD 2.5 Terabyte.

"CalDigit arises in the marketplace as a truly affordable RAID solution offering the capacity to support the uncompressed HD of this intensive stage of my editing."

To read more about Arthur Smith and the S2VR Series, please visit:
www.CalDigit.com

CalDigit / True HD Solution



cnet Editors' Choice OCT 2006
B
HIGHLY RECOMMENDED iLounge.com | All Things iPod
R
playlist PICK
B,R
Macworld
R
B
vibe
bass freq
R
remix m-class
introducing
v-moda
modaphones
hearwear collection
visit v-moda.com
Vibe available at Apple Store, Virgin Megastores,
Fry's Electronics, and v-moda.com
Virgin Megastore

'Poof! Three months of work gone because I hit the wrong key.'
Just because it's gone, doesn't mean it's gone for good. Get the hardest working data recovery software for Mac OS X on the job.
FileSalvage™ can undelete files from your hard drive, digital camera or iPod.
Even if you've accidentally formatted it or your drive is corrupted... you can still get your important files back.
See for yourself
Visit www.SubRosaSoft.com for more information.
FILESALVAGE™
SUBROSASOFT.COM
Mac
Universal
Mac and the Mac logo are trademarks of Apple Computer, Inc., registered in the U.S. and other countries.

Connect with all the products

PERIPHERALS

ViewSonic
the choice of professionals

Superior Functionality

New! 22" VX2245wm Widescreen LCD Monitor with ViewDock™

- 8-in-1 card reader, iPod dock, microphone, headphone jack, USB ports, and built-in speakers and subwoofer

ONLY $399 #7284552

Fill Your Home with Sound, not Stereo Components

Authorized Reseller

iPod Hi-Fi

- Plug in your iPod for audiophile-quality stereo sound
- Room-filling sound from a compact design

NEW!

ONLY $344 #6317922

Canon

Superior Shooting

PowerShot SD600

- ISO 800 low-light shooting
- 6.0 megapixels, 3X optical zoom

ONLY $249.95 #6579720

EPSON EXCEED YOUR VISION

Not Just a Printer

Stylus CX6000 All-in-One

- High-speed faxing, full-featured scanning, PC-free copying and printing
- 27ppm

ONLY $149.95 #7050140

BUFFALO

Hard-Working Hard Drive

500GB DriveStation Duo™

- Supports RAID 1 and Full Capacity Spanning Modes
- Powers on and off with your PC
- Memeo™ AutoBackup software

ONLY $238.95 #6874041

Mac Pro

The Fastest and Most Powerful Mac

Authorized Reseller

NEW! Mac Pro with Dual-Core Intel® Xeon® Processors

- Two Dual-Core Intel® Xeon® processors running at up to 3GHz
- 16X double-layer SuperDrive
- NVIDIA GeForce 7300 GT graphics (256MB)
- Easily expandable internal storage up to 2TB
- Open bay accommodates second optical drive and Front Row
- iSight camera

Monitor sold separately.

NEW Mac Pros START AT $2099

Mac Pro 2GHz
- Two Dual-Core 2GHz Intel® Xeon® Processors
- 1GB RAM
- 160GB HD

$2099 #6317113

Mac Pro 2.66GHz
- Two Dual-Core 2.66GHz Intel® Xeon® Processors
- 1GB RAM
- 250GB HD

$2494 #6317076

Mac Pro 3GHz
- Two Dual-Core 3GHz Intel® Xeon® Processors
- 2GB RAM
- 500GB HD

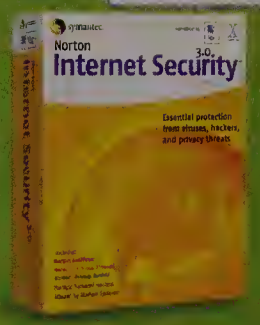
$3294 #6317121

hp invent

Register for an eSeminar on February 21st @ 12:30 p.m. EST to learn about industry trends and new products for professional designers: **www.macconnection.com/hpdesignjet**

SOFTWARE

symantec.



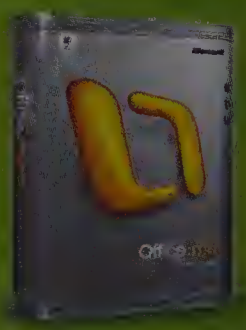
ONLY $89.95 #437634

Build a Fortress for Your Mac

Norton Internet Security 3.0 for Mac

- Personal Firewall keeps sensitive info safe while keeping attacks out
- Automatic virus removal without interruption

Microsoft



ONLY $346.95 #4893053

The Leading Productivity Suite –for Mac

Office 2004 for Mac Standard

- Access emails, documents, audio, and video from one location
- Create better-looking documents and presentations

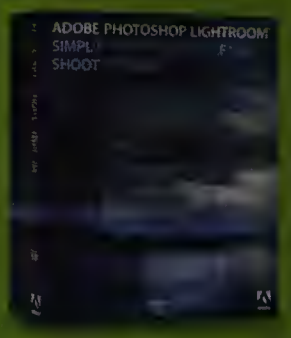
Quark Authorized Reseller

ONLY $94.95 #7230749

QuarkXPress Meets Sound, Video, and Animation

New! Quark Interactive Designer allows you to design for multiple channels in a single file. Create interactive online ads, presentations, and complete websites with the same software. Requires QuarkXPress 7.

Adobe



ONLY $49.95 #7378268

Photography From Shoot to Finish

New! Adobe® Lightroom 1.0 is the go-to application for managing, adjusting, and presenting large volumes of digital photographs. Spend less time at the computer and more time behind the lens.

800.800.3333 | **www.macconnection.com/mw**

© 2007 MacConnection. All rights reserved. MacConnection is a registered trademark of PC Connection, Inc. or its subsidiaries. All other copyrights and trademarks remain the property of their respective owners. Our Sales Policy–All sales are subject to MacConnection's Standard Terms of Sale. You may review the Terms of Sale at www.macconnection.com. 10430 1/07 DC307 MC307

you want, all in one place

So Powerful, So Affordable, So Perfect Authorized Reseller

NEW! MacBook

with Intel® Core™2 Duo Processor

- Up to 4MB shared L2 cache, 2GHz with 667MHz FSB
- Up to 2GB RAM
- Up to 120GB SATA HD
- Intel® Graphics Media Accelerator 950
- 6X slot-loading SuperDrive (DVD±R DL/DVD±RW/CD-RW)
- 13.3" display
- Mac OS X v10.4 Tiger and Front Row
- iSight camera

NEW MacBooks START AT **$1094**

Same Small Size, Now up to 4X Faster

STARTING AT **$594**

NEW! Mac mini models

- The most affordable way to get new Intel® Core™ processing that operates as much as 4X faster than G4-based Mac mini models
- iLife '06 and Front Row software included
- IDVI/VGA video support
- Apple Remote lets you enjoy your music and video from anywhere in the room

Mac mini

1.5GHz Intel® Core™ Solo

- 1.5GHz Intel® Core™ Solo Processor
- 512MB RAM
- 60GB hard drive
- Combo drive
- Bluetooth
- AirPort Extreme wireless (802.11g)

$594 #6317201

Mac mini

1.66GHz Intel® Core™ Duo

- 1.66GHz Intel® Core™ Duo Processor
- 512MB RAM
- 80GB hard drive
- SuperDrive
- Bluetooth
- AirPort Extreme wireless (802.11g)

$794 #6317210

Intel at the Core

NEW! MacBook Pro

with Intel® Core™2 Duo Processor

- Up to 4MB shared L2 cache, 2.33GHz with 667MHz FSB
- Up to 3GB DDR2 SDRAM
- Up to 160GB Serial ATA HD
- ATI Mobility Radeon X1600 with 256MB GDDR3 memory
- Up to 8X slot-loading SuperDrive (DVD±R DL/DVD±RW/CD-RW)
- New 17" display
- Mac OS X v10.4
- iSight camera
- FireWire 800

NEW MacBook Pros STARTING AT **$1994**

Same Apple, New Chip– Twice as Fast!

NEW! iMac

with Intel® Core™2 Duo Processor

- 4MB shared L2 cache, up to 2.33GHz, 667MHz FSB
- 1GB DDR2 SDRAM
- Up to 250GB Serial ATA HD
- 17", 20", or 24" widescreen LCD
- ATI Radeon X1600 graphics with 128MB GDDR3 memory
- Slot-loading 8X double-layer SuperDrive (DVD±RW)
- Built-in AirPort Extreme and Bluetooth 2.0 + EDR

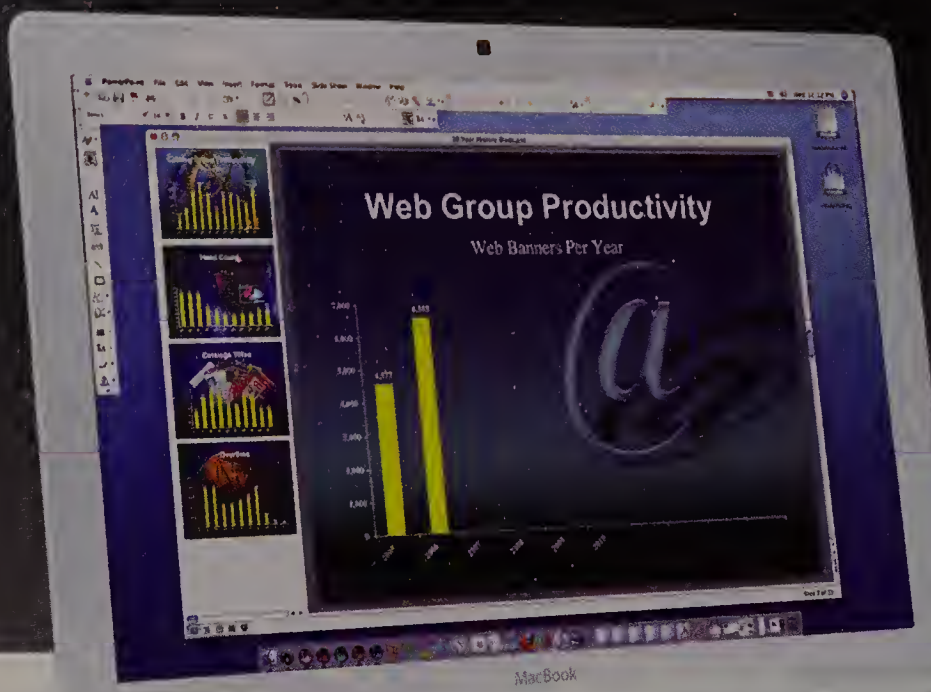
NEW iMacs START AT **$994**

the right tools for the right brain™

MacConnection®

A PC CONNECTION BRAND

MacMall—The #1 Apple Direct Reseller!



Apple MacBook™

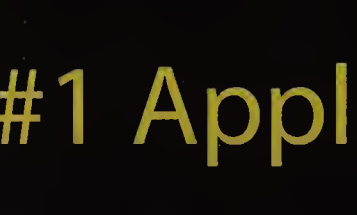
- Intel Core Duo 2 processing up to 2.0GHz
- 13.3" glossy widescreen display
- Up to 1GB 667MHz DDR2 SDRAM; exp. to 2GB
- Up to 120GB Serial ATA hard disk drive
- Combo drive or dual layer SuperDrive™
- Built-in iSight™ videoconferencing

starting at ~~$1094~~
– $75
$1019!* #7141485

Apple Mac® Pro

- Two Dual-Core Intel Xeon processors up to 3GHz for Quad-Core performance
- Incredible memory expansion up to 16GB
- 16X SuperDrive (DVD+R DL/DVD±RW/CD-RW)

starting at ~~$2099~~
–$100
$1999!* #7099447



Apple iMac®

- Up to 24" widescreen display
- Intel Core 2 Duo processing up to 2.33GHz
- AirPort Extreme 802.11g wireless
- Integrated Gigabit Ethernet networking

starting at ~~$994~~
–$75
$919!* #7098936

Apple Mac® mini

- Intel Core Duo processing up to 1.83GHz
- Supports up to 2GB of 667MHz DDR2 SDRAM
- Combo Drive (DVD/CD-RW) or SuperDrive
- AirPort Extreme 802.11g wireless

starting at ~~$594~~
–$20
$574!* #7099441

NEW! Products from Macworld Conference and Expo!

Apple AirPort Extreme Base Station
802.11a/b/g/n
#7185425

only $179!

d2 Blu-ray DVD Drive USB 2.0 and FireWire®
#7185560

only $1,139.99!

ExpressCard/34 5:1 Card Reader
#7181004

only $23.99!

Flip DVI-D 2-Port KVM Switch
#7185434

only $169.99!

d2 Quadra 500GB Ext. HD eSATA, FireWire 800/400 and USB 2.0
#7185563

only $289.99!

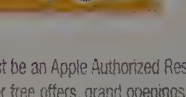
Call for details!

QuickBooks Pro 2007 for Mac
#7119553
Intuit
only $185.99!

TurboTax Federal and State Deluxe 2006
#7127990
Intuit
only $44.80!

Toast 8 Titanium for Mac
#7171710
roxio

only $84.95!



Elevator Laptop Stand
#7121628
GRIFFIN

only $41.99!

*WE'LL BEAT ANY PRICE ON ANY APPLE BRAND PRODUCTS or competitive promotion on any Apple computer. We may require proof of dealer's pricing. Competitor must be an Apple Authorized Reseller. Product must be in stock at the competition. Advertised item must be identical to the one offered by MacMall and must be a new item in a factory sealed box. We reserve the right to limit quantity ordered. This offer does not apply to special, bonus or free offers, grand openings, special purchases or special buys, manufacturer's rebates, closeouts, clearances or to dealers' one-of-a-kind or other limited quantity offers. Nor does it apply to advertising errors made by any authorized dealer. Not open to dealers. Void where prohibited. Sorry, offer not valid in conjunction with other rebate offers. On multiple-item quotes, "We'll Beat Any Price" applies to the price of the entire order, not individual line items. Offer applies to pre-taxed prices only. Offer valid only at time of purchase, not after the fact. ■ UP TO $200 CASH BACK OFFER-Get up to $200 Cash Back via MacMall mail-in rebate with purchase of select computer models. Ends 2/28/07. ■ FREE BELKIN KICKSTAND LEATHER CARRYING CASE OFFER-Free with purchase of select iPod Video (new 30GB/80GB models) after $14.99 MacMall mail-in rebate offer. Price before rebate is $14.99. Ends 2/28/07. ■ FREE ACRYLIC CASE OFFER-Free with purchase of any anodized aluminum iPod nano after $14.99 MacMall mail-in rebate offer. Price before rebate is $14.99. Ends 2/28/07. ■ FREE ENGRAVING OFFER-Get select iPod or iPod nano models engraved for FREE when you purchase it through

We'll beat any price on any Apple® brand products!*

See below or call for details.

Save up to $200! After mail-in rebate. See below for details.

Apple MacBook™ Pro

- Up to 2.33GHz Intel Core Duo 2 processing
- SuperDrive (DVD+R DL/DVD±RW/CD-RW)
- Built-in iSight videoconferencing
- AirPort Extreme 802.11g wireless

starting at ~~$1994~~
– $150
$1844!* #7133508

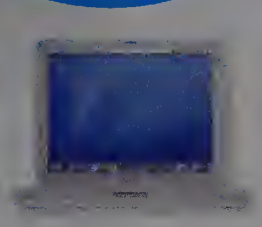
iPod® nano

- NEW! Up to 8GB of storage
- NEW! Scratch-resistant casing
- NEW! 40% brighter display
- NEW! Up to 24 hours of battery life per charge

starting at $144 #7098953

FREE Engraving!*

Call MacMall and learn how to integrate your iPod & computer with your widescreen plasma or LCD TV!



Apple iBook® G4

- PowerPC™ G4 up to 1.42GHz processor
- Supports up to 1.5GB of 667MHz DDR2 SDRAM
- Combo Drive (DVD/CD-RW) or SuperDrive
- AirPort Extreme 802.11g wireless

starting at ~~$799.99~~
–$100
$699.99!* #766221

Run Windows on your Mac!

Parallels Desktop for Mac
#7080016

~~$79.99~~ **$9.99!**

Only $9.99 after $10 mfr. and $60 MacMall mail-in rebates with purchase of any Intel-based Apple computer. Price before rebates is $79.99. Ends 2/28/07. Microsoft Windows XP software not included.

MacMall is the #1 source for LCD & plasma widescreen TVs!

SAMSUNG · OLEVIA · SHARP

Engrave your iPod shuffle for just $4.99!

1GB iPod shuffle

- Holds up to 240 songs
- Amazingly small—only 1.07" tall, 1.62" wide and 0.41" deep

only $74 #7098940

iPod with Video

- Now offers up to 80GB of storage
- Download and play cool games

starting at $244 #7098947

FREE Engraving!* select models

30GB iPod U2 Special Edition

- Holds up to 7,500 songs, up to 25,000 photos or up to 75 hours

only $274 #7098945

MacMall is the #1 source for iPods and iPod accessories!

2-Year AppleCare® for iPod shuffle and iPod nano
#7185433
New!
only $39!

TuneStudio
#7185420
BELKIN
New!
only $239.99!

Bluetooth Dock Adapter for iPod
#7185431
BELKIN
New!
only $129.99!

2-Year AppleCare for iPod Video
#336763
only $59!

Industrial Design FireWire Speakers
#537347
LACIE
only $79.99!

iPod Power AC Adapter
#188263
Wintergreen Systems
only $9.99!

Tempo Sport Armband for iPod nano
#7096366
GRIFFIN
only $12.99!

Tempo Sport Armband for iPod Video
#7096365
GRIFFIN
only $12.99!

3-in-1 Interchangeable Leather Case for iPod nano
#7049941
GRIFFIN
only $9.99!

MacMall® 1-800-321-7532
Visit us at macmall.com
Source Code: MACWORLD

MacMall. No rebate required. Not available for U2 Special Edition iPod. There is a $4.99 charge for iPod shuffle models and a $9.99 charge for select iPods. Call or visit www.macmall.com/mypod to place your order. ■ FREE FM TRANSMITTER OFFER- After $19.99 MacMall mail-in rebate. Price before rebate is $19.99. Ends 2/28/07. ■ ALL OFFERS VALID ONLY WHILE SUPPLIES LAST ■ Download rebate coupons at www.macmall.com/rebates.

LAPTOP AND IPOD BATTERIES

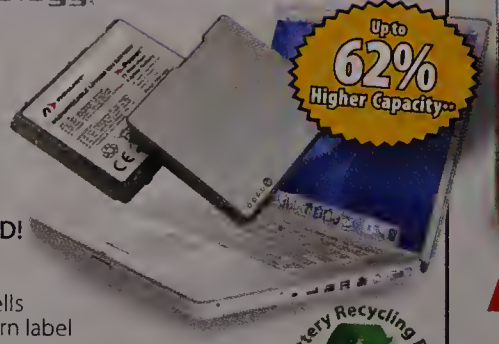
www.macsales.com/newertech

newertechnology

NuPower Apple® iBook® and Powerbook® Laptop Batteries

The highest capacity replacement batteries for Apple computers PERIOD!

- Made in the USA
- Thermal fuse technology
- Balanced top tier power cells
- Free battery recycling return label



Model	+ Capacity*	Price
G3 PowerBooks 'Lombard'	up to 62%	from $135.99
G3 PowerBooks 'Pismo' 2000	up to 62%	from $135.99
G3 PowerBooks 'WallStreet'	up to 25%	from $129.99
G4 'Titanium'	up to 48%	from $129.99
G4 'Aluminum' 12" display	up to 17%	from $139.99
G4 'Aluminum' 15" display	up to 16%	from $139.99
G4 'Aluminum' 17" display	up to 21%	from $129.99
G3 iBooks 12"- 12.1" display	up to 51%	from $99.95
G3 or G4 iBook 14" display	up to 34%	from $99.95
iBook 'ClamShell'	up to 50%	from $129.99

FREE Battery Recycling Return Shipping Label

Designed, Engineered, and Manufactured in the USA

RoHS Compliant
Lead Free RoHS 2002/95/EC

* Percentage represents additional capacity over the stock Apple battery for the same model.

NuPower® iPod® Replacement Batteries

Listen, watch, play longer with *HOURS* added to your runtime!

"Probably the best value upgrade for the iPod we've ever seen!"
-MacUser

Online installation videos, tools included and installation service available.

- RoHS Compliant
- 1 year warranty

Model	mAh	+ Capacity*	Price
1st & 2nd Generation	up to 2200	up to 78%	from $5.00
3rd Generation	up to 850	up to 34%	from $25.9
4th Generation	up to 1350	up to 114%	from $25.9
iPod mini	up to 600	up to 50%	from $24.9
5th Generation Video	up to 800	up to 26%	from $19.9
1st Generation nano	up to 450	up to 36%	from $19.9

MacUser HIGHLY RECOMMENDED ipodlounge.com playlist ExtremeiPod

MEMORY UPGRADES

www.macsales.com/memory

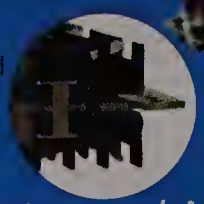
We have the right memory for your Mac®

OWC Mac Pro Quad Xeon® Memory

Add up to 16.0 GB sets of memory
(2GB Modules x 8)

Mac Pro memory from **$227.99**

OWC Mac Pro Quad Xeon Memory is fully tested and certified to meet or exceed all Apple specifications for use in Mac Pro Quad Xeon for a lifetime of performance and includes the use of actual Apple-Qualified Heat-Spreader to ensure you can utilize these models with full confidence



Detail of Apple-Qualified OWC heat spreaders for Mac Pro Quad Xeon

Cash Back!
OWC offers memory trade in rebates see *www.macsales.com* for details

Memory for Apple's Intel® Macs

Up to 3GB sets available**

from **$62.95**

Regardless of which of Mac's What's Pro [illegible] and with the addition of the **Intel MacBooks**, **iMacs** in the **Mac minis** OWC has memory for the best quality **Intel Core Duo** **Intel Core 2 Duo Macs**

** Some Intel Macs will only support memory up to 2GB.

Memory for all Macs

from **$15.99**

OWC is know throughout the industry as a [illegible] selection, and value, there is simply no reason to [illegible] else for your Mac memory needs.

All memory from OWC meets or *exceeds* Apple's specifications and is backed by a 30 day money-back guarantee and LIFETIME Advance Replacement Warranty.

MODBOOK™

www.macsales.com/modbook

Axiotron

World's First and Only Mac Tablet Solution

ModBook the tablet with the heart of a MacBook. Built for mobile users, artists, students and professionals enabling the user to write directly on the screen.

from **$2279**

All features standard on Apple MacBook sans Keyboard & Mouse, and:

- True pen & handwriting recognition
- Integrated CD/DVD drive or DVD Burner
- built-in iSight™ camera
- Global Positioning System (GPS) option
- Aircraft grade magnesium alloy for all terrain use

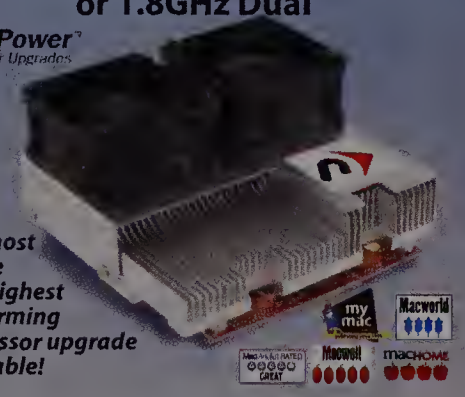
Macworld BEST OF SHOW 2007

PROCESSOR UPGRADES

www.macsales.com/accelerators

Add Speed! As High as 2.0GHz or 1.8GHz Dual

MAXPower™ Processor Upgrades



The most stable and highest performing processor upgrade available!

Full line of G4 upgrades.

30 Day, 100% money-back guarantee & 3 year warranty on all OWC and Newer Technology, Inc. G4 processor upgrades.

NewerTech MAXPower™ G4 Processors
G4/7447A from **1.6GHz - 2.0Ghz** or up to **Dual 1.8GHz** from **$249.00**

OWC Mercury™ Extreme G4 Processors
G4/1.2GHz from **1.0GHz to 1.5GHz** from **$179.00**

IPOD ACCESSORIES

www.macsales.com/ipod

Mod Your Pod

newertechnology

OWC carries a full line of iPod accessories including batteries, cases, headphones, speakers, and much more to get the most out of your iPod.

TRAFFICJamz
FM Transmitter + iPod Charger. Enjoy your jamz on the road! Play your Apple iPod through your car stereo.
Only $34.95

ViDEO+
Rechargeable battery pack, charging station and stand for the iPod Video. Get up to 16 hours of video or 80 hours of music with a fully charge iPod and ViDEO+
Only $54.99

Mercury, Neptune, and On-the-Go are trademarks of Other World Computing. Xeon and Intel is a registered trademark of Intel Inc. NuPower and TRAFFICJamz are registered trademarks of Newer Technology, Inc. MAXPower, miniStack, & ViDEO+ are trademarks of Newer Technology, Inc. Apple, Mac, FireWire, SuperDrive, iBook, PowerBook, iMac, eMac, PowerMac, iSight, & iPod are registered trademarks of Apple, Inc. MacBook is a trademark of Apple, Inc. ModBook is a trademark of Axiotron, Inc.

EXTERNAL STORAGE SOLUTIONS (FIREWIRE, USB & ESATA)

www.macsales.com/storage

Expand Your Storage Capacity and Port Flexibility With the Powerful, Space-Saving miniStack™!

Newer Technology, Inc.™ miniStack V2

Whisper Quiet Operation

"A welcomed addition to any Mac..." -MacMod

Macmini.com · Macworld · MacAddict RATED GREAT · EDITORS' MacAddict CHOICE

miniStack™ V2 FireWire 400 USB 2.0 — $114.99

miniStack™ V2 — $99.00

OWC Mercury™ Elite-AL single Professional FireWire/USB storage solution external HD.

$109.99

$129.99

$137.99

$179.99

OWC Mercury Elite-AL RAID Professional FireWire/USB storage solution external HD.

Pro 400 Performance RAID — $205.99

Pro FW800/400 USB 2.0 RAID — $249.99

Pro 400 RAID 1 Mirrored FW800/400 USB 2.0 — $349.99

Pro 600 RAID 0+1 Stripe+Mirror FW800/400 — $629.99

Featured Solutions

500GB NewerTech miniStack — $139.00

F500GB OWC Mercury Elite-AL Quad FW800/FW400/USB2/eSATA — $269.99

1.0TB OWC Mercury Elite AL RAID FW800+400 USB 2.0 — $449.00

OWC Mercury On-The-Go™ totally bus-powered pocket, sized solution

USB 2.0 — $93.99

FireWire 400 — $99.97

FireWire 400 + USB 2.0 — $114.99

FireWire 800/400 + USB 2.0 SATA — $152.99

OWC Neptune™ – Value Done Right

FireWire 400 (USB 2.0) — $92.99

PROSOFT · XSAVASTOR · Backup by EMC Retrospect

HARD DRIVE UPGRADES

www.macsales.com/harddrive

2.5" SATA Drives

Serial ATA Notebook 2.5" is the fast, simple solution for today's latest laptop models. First widely utilized in laptops manufactured in 2006, SATA supports data rates of up to 150MB/s.

$79.99

2.5" ATA Drives

The IDE/ATA 2.5 Laptop drives offered are all 9.5mm and compatible with Apple iBook G3 & G4, PowerBook G3 & G4, and PC Laptop Models which utilize a 2.5" IDE or ATA Notebook.

7200 RPM

$87.99

3.5" SATA Drives

Fast, Simple! First introduced in Apple's new Power Mac G5 series computers, Serial ATA is simply 'Plug-and-Play'. No jumpers to worry about - just connect and go! It also supports data rates up to 300 megabytes per second!

7200 RPM

750GB

$52.99

3.5" ATA Drives

Used as replacement or additional drives for DOS/Windows computers, Apple® Power Mac G4, G3 desktops and minitowers, and other compatible solutions.

7200RPM

750GB

$52.95

USB 2.0 UNIVERSAL DRIVE ADAPTER

The Swiss Army Knife for Techs

The USB 2.0 Universal Drive Adapter

Connect any 2.5", 3.5", 5.2" IDE and SATA device to your computer through your USB 2.0 port. Easily transfer files from computer or notebook, back up files, or store large file archives on hard drives.

from $24.95

ENCLOSURE KITS

www.macsales.com/enclosures

Do-It-Yourself Enclosures -customize your solution

OWC and NewerTech offer many of their award winning storage solutions as enclosures and enclosure bundles.

- 2.5" ATA OWC **On-The-Go** enclosures from **$29.95**
- 2.5" SATA OWC **On-The-Go** enclosures from **$89.99**
- 3.5" ATA NT **miniStack** enclosures from **$69.00**
- 3.5" ATA OWC **Mercury Elite Pro-CL** from **$39.00**
- 3.5" SATA OWC **Mercury Elite-AL Pro** from **$79.99**

Hard drive not included with enclosure kits.

SUPERDRIVES™

www.macsales.com/superdrives

MacAddict RATED GREAT · EDITORS' MacAddict CHOICE · Macworld

Read & Write DVD's & CD's

Add an internal or External Superdrive

External FireWire/USB2 Solutions from ***$99.95***

Internal SuperDrive Solutions for G3/G4/G5 Desktop & Tower Macs from ***$29.99***

for **PowerBook G4** from ***$99.99***

for **iMac G5** from ***$99.99***

for **Mac mini** from ***$99.99***

OWC

Other World Computing

Serving the Mac Universe since 1988

800.275.4576

www.macsales.com

2004-2005-2006 Circle of Excellence Gold Honoree — 1 of just 28!

No Matter The Mac We've Got You covered

From 60x, G3, G4, G5 to Intel Desktops, Towers, Laptops, and All-In One OWC has the Goods to Maximize your Mac

Prices, specifications and availability are subject to change without notice. Items returned within 30 d… may be subject to a restocking fee. No return will be accepted without Return Merchandise Authorization number.

ADVERTISERS INDEX

Interact with the companies whose products and services are advertised in Macworld.

ADVERTISER	INTERACT	PAGE NO.
3 Cats and a Mac	3caam.com	112
4 Over Inc.	4over.com	113
Academic Superstore	mw.academicsuperstore.com	118
Acme Made	acmemade.com	111
ADC Developer Showcase	.	91-96
AMCC	3ware.com	51
AmericasPrinter.com	americasprinter.com	117
Apple Computer	apple.com	C2-1
ATTO Technology	attotech.com/mac.html	97
Audioengine	audioengineusa.com	110
Axio Designs	axio-usa.com	111
BeLight Software	belightsoft.com	97
Biomorph	biomorph.com	111
Buffalo Technology	buffalotech.com/techworks	97
Bumbakpaks	bumbakpaks.com	111
CalDigit	caldigit.com	100
CDW	cdw.com	23
Circus Ponies	circusponies.com	27
Creative Juices	bigposters.com	115
Crucial Technology	crucial.com/macworld	41
DataVideo	datavideo.us	109
Dekorra Optics	eazydraw.com	100
Disc Makers	discmakers.com/mw	112
DLO	dlo.com	45
Drive Savers	drivesavers.com	114
EDG Graphics	edgmiami.com	115
Endicia	mac.endicia.com	98
Epson	epson.com	2-3
ESS Data Recovery Labs	savemyfiles.com	114
Etymotic Research	etymotic.com	14
FatCow	fatcow.com/mac	118
Firmtek	firmtek.com	99
Ford	fordvehicles.com/edge	8-9
Fujitsu	fcpa.fujitsu.com/scanners/96c5	15
G-Technology	g-technology.com	97
Geek Cruise	geekcruises.com	50
Gefen	gefen.com	99
Granite Digital	granitedigital.com	110, 112
Griffin Technology	griffintechnology.com	19
Hewlett-Packard	hp.com/go/extreme8	C4
Hildreth Enterprises	pcprices.net/mac	116
iHome	ihomeaudio.com	47
i-Luv	i-luv.com	39
IMSI	turbocad.com/mw	112
Intego	intego.com	31
Journey Education	journeyed.com	116
LaCie	lacie.com	7
Mac Solutions	macsolutions.com	116, 118
MacConnection	macconnection.com/mw	102-103
MacHighway	machighway.com	110
MacMall	macmall.com	4, 104-105
MacSpeech	macspeech.com	100
Mark/Space	markspace.com	100
Marware	marware.com	111
MegaMacs	megamacs.com	118
Micromat	micromat.com	25
MicroReplay	microreplay.com	116
NEC	necdisplay.com/pro	10
New Egg	newegg.com	32-33
Omni Group	blog.omnigroup.com	43
Other World Computing	macsales.com	C3, 13, 106-107
Portable Sound Labs	imaingo.com	49
PowerMax	powermax.com	119
ProClip	proclipusa.com	98
Prosoft Engineering	prosofteng.com	110
Rain Design	raindesigninc.com	109
Ramjet	ramjet.com	117
Retractable Banners	tradeshow-stuff.com	115
Ricoh	ricoh-usa.com/itchannel	18, 28
Rocstor	rockstor.com	99
Rosetta Stone	rosettastone.com	71
SeafoodByNet	seafoodbynet.com	117
Seiko Instruments	siibusinessproducts.com	12
Sharpdots	sharpdots.com	115
ShieldZone	shieldzone.com	98
Shreve Systems	shrevesystems.com	117
SubRosaSoft	subrosasoft.com	101
TechRestore	techrestore.com	115
V-Moda	v-moda.com	101
Visible Dust	visibledust.com	98
Wacom	tabletphotofun.com	17
Wholesale Printing Direct	wholesaleprintingdirect.com	114
zCover	zcover.com	29

March 2007, Volume 24, Number 3 Macworld (ISSN 0741-8647) is published monthly by Mac Publishing, L.L.C. Editorial and business offices: 501 2nd St. 5th Flr., San Francisco, CA 94107, 415/243-0505. Subscription orders and inquiries should be directed to 515/243-3273. Subscription rates are $34.97 for 12 issues, $59.97 for 24 issues, and $79.97 for 36 issues. Foreign orders must be prepaid in U.S. funds. Add $10 per year for postage for Canada; add $25 per year for air freight for all other countries. Canadian GST Registration #868421876. Periodicals postage paid at San Francisco, California, and at additional mailing offices. Canada Post Publications Mail Agreement No. 40683173. Returns: 4960-2 Walker Road, Windsor, Ontario, Canada N9A 6J3. Postmaster: Send address changes to Macworld, Subscription Dept., P.O. Box 37781, Boone, IA 50037-0781. Printed in the U.S.A.

iGo $333

i360° $39.90

iWoofer $119

c|net
Editors' rating
Very good

iLevel $79.90

iLap from $49.90

www.raindesigninc.com 1800 797 7321 rain

The Missing Sync™

Get the most from devices running:

- Windows Mobile 5
- Windows Mobile Smartphone
- Pocket PC
- Palm OS
- Sony PSP

Macworld Expo Booth S1844

Macworld

Mac Universal

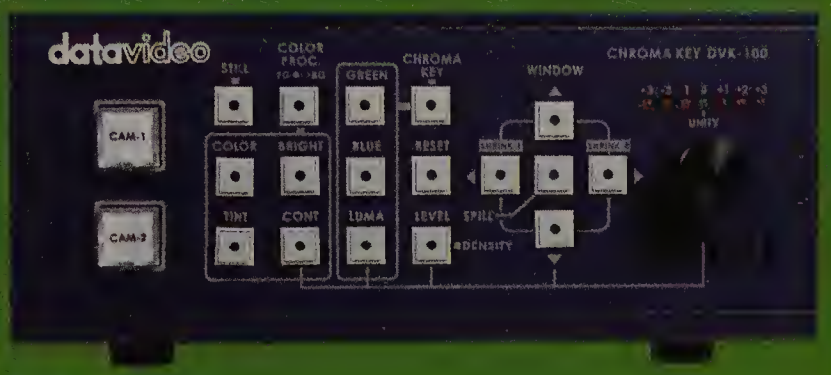
mark/space

Say goodbye to outdated synchronization software

www.markspace.com

Chromakey

Real Time - Right Now



The DVK-100 works with Green and Blue backgrounds. Prefect for corporate and educational applications. Easy to set up and simple to use. See a demo at http://www.datavideo.us/fs/products/dvk100_fs.htm

datavideo®

12300 E. Washington Blvd., Suite U
Whittier, CA 90606
Tel: 888-809-3282 www.datavideo.us

Go ahead, wake the neighbors!

©2006 Audioengine Apple iPod®, Universal Dock® and dancing girls not included.

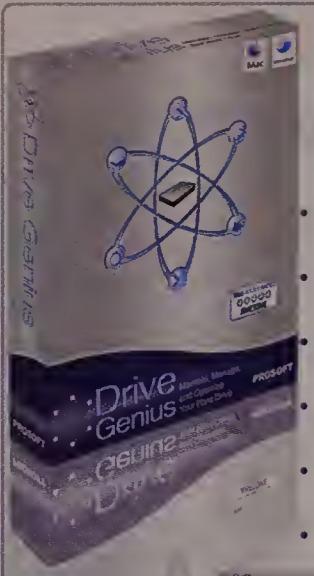
audioengine 5

www.audioengineusa.com

Wireless Ready • Self-powered • Works with everything • (877)853-4447

Drive Genius

Maintain, Manage, and Optimize Your Hard Drive



- Defrag & Optimize - Get the most speed and efficiency possible by optimizing your hard drive
- Repartition On-The-Fly - Add, delete, hide, expand or shrink partitions without having to reformat your hard drive
- Directory Repair - Fix corruption on volume structures to get your damaged hard drive up and running
- Clone - Fast and easy volume or entire drive cloning
- Sector Editing - Powerful feature for professional users
- Benchmarking & S.M.A.R.T. - Make sure your hard drive performance is what it should be with comprehensive speed test, diagnostics testing, and graphical comparisons

Now Universal

Mac Universal

Check out Prosoft's other award-winning utilities
- Data Rescue II
- Data Backup
- Picture Rescue

Where to buy

Apple Store · MICRO CENTER · INGRAM MICRO · NAVARRE · OWC · fry's · COMPUSA

PROSOFT engineering, inc.
303 Ray Street
Pleasanton, CA 94566 USA
1-877-4-PROSOFT
www.prosoftengineering.com

Emergency Drive Copy

Quickly connect a SATA / IDE Drive to a USB Port

Plugs into any USB Port.
No software needed.

USB 2.0 to SATA/IDE Cable... $24.95

The tool every computer user must have. Copy, Backup, Duplicate, Recover, Repair, Restore, Archive, or Test any SATA or IDE Hard Drive. Makes it easy to upgrade an internal hard drive or make a duplicate copy of critical data without having to open up the computer.

Granite D•I•G•I•T•A•L

• Granite Digital • 3101 Whipple Road • Union City, Ca. 94587 •
• granitedigital.com • 510-471-6442 - Tel • 510-471-6267 - Fax •

MacHighway™

MAC POWERED WEB HOSTING, EMAIL AND ECOMMERCE FOR MAC USERS BY MAC USERS,

SINCE 1997

Host your site, blog, or store on an Xserve running Mac OS X. Plans for as little as *$4.12 a month*

Get a free month when you sign up!

Use coupon code A7643

www.MacHighway.com

TOLL FREE 1-800-604-9960

Mac, Mac OS, Xserve are registered trademarks of Apple Computer, Inc.

© 2007 Category 99, Inc. All rights reserved

iPodcases

Softpacks

MacBookcases

Hardpacks

Select items available at Apple stores, Apple online or axio-usa.com | axio

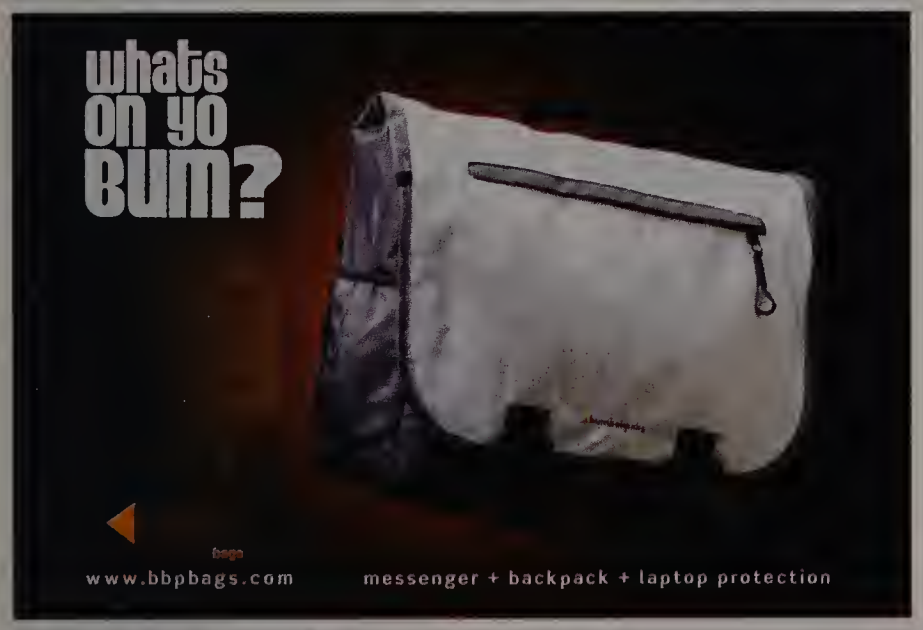
For a limited time receive free FedEx ground shipping with **promotional code AOMW07.**

Dealer & distributor inquiries welcome.

ACME
MADE
MANUFACTURING
SAN FRANCISCO
EST. 2002 USA

modern products for a modern lifestyle.

acmemade.com



biomorph®

ergonomic computer furniture that adjusts to your lifestyle at the touch of a button

order at ***biomorph.com***
free catalog ***888 302 DESK***

USB Travel Dock

iPod shuffle
2nd generation

Maximize the compact design and performance of your 2G iPod shuffle with Marware's sleek, space-saving USB Travel Dock.

- Lightweight and portable
- Designed specifically for 2G iPod shuffle
- Use to conveniently charge and sync your iPod
- No interference with any adjacent ports
- Blue "Power On" LED indicator

www.MARWARE.com

IMSI

Version 2

TurboCAD® MAC PRO

Precision 2D Drafting & 3D Modeling

AutoCAD® & Adobe® Illustrator® Compatible
Realistic 3D Rendering
Intuitive. Powerful. Precise.

To order call: 1-800-833-8082 Use Promo Code: MacWorld06
or visit: www.turbocad.com/mw06

FastRAID Backup

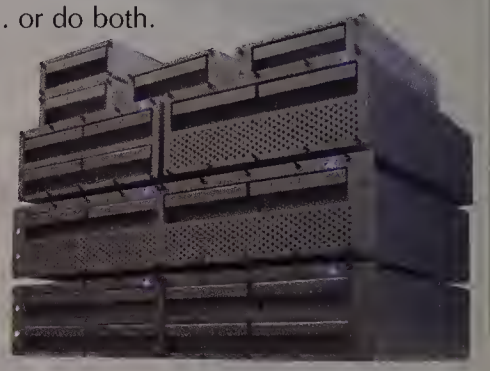
SATA II RAID Backup Drive Systems from $159.00

Macworld

Extra Removable Drive Trays $19.95

These new Aluminum Hot-Swap RAID Systems are as fast as it gets, over 130MB/s! Simply slide two SATA drives into the supplied trays and the system is ready to go. Create a RAID 0, 1 or use the drives as simple Hot-Swap Volumes... or do both.

Our Large RAID 5 Systems can store up to 6 Terabytes... at a price everyone can afford.



Granite
D•I•G•I•T•A•L
granitedigital.com

3101 Whipple Rd., Union City, CA. 94587 • 510-471-6442-tel • 510-471-6267-fax

AT LONG LAST!

An automated duplicator for your Mac.

Pico duplicator and MP3 ripper just $699

Call 1-866-309-8627 or visit
www.discmakers.com/mw

DISC MAKERS™

A Cook's Books SOFTWARE
RECIPE MANAGEMENT

$24.95
INTRODUCTORY OFFER

USE CODE: ItJustWorks!
www.3caam.com

SEND AN EMAIL!

@

Macworld SHOWCASE

niki_stranz@macworld.com

Make the most of your mouse rating in Macworld

Transform your great press into a valuable marketing tool.

Reprints, Eprints and NXTprints of your *Macworld* mouse rating allow you to place this positive press directly into the hands of your clients, prospects, employees, investors and recruits.

For more information contact RMS:
800-290-5460 ext. 100
macworld@reprintbuyer.com
www.reprintbuyer.com

RMS REPRINT MANAGEMENT SERVICES

IF ONLY WARHOL HAD 4OVER...

Andy Warhol expressed himself in new, exciting ways. Now 4over lets you express yourself in great new ways too. We are the first printing company in the nation to have the Komori 10-Color Super Perfector Doublecoater. Express yourself in new exciting ways. Use 4over.

FULL BLEED

AVAILABLE SILVER PMS #877

WE'LL MATCH ANYBODY'S ADVERTISED PRICE AND WILL BEAT THEIR QUALITY

200 LINE SCREEN ON EVERY JOB

Stochastic {FM} SCREENING

FREE UPGRADE 14pt→16pt

4OVER, INC.
PERFECTING YOUR PROFITS
4OVER.COM

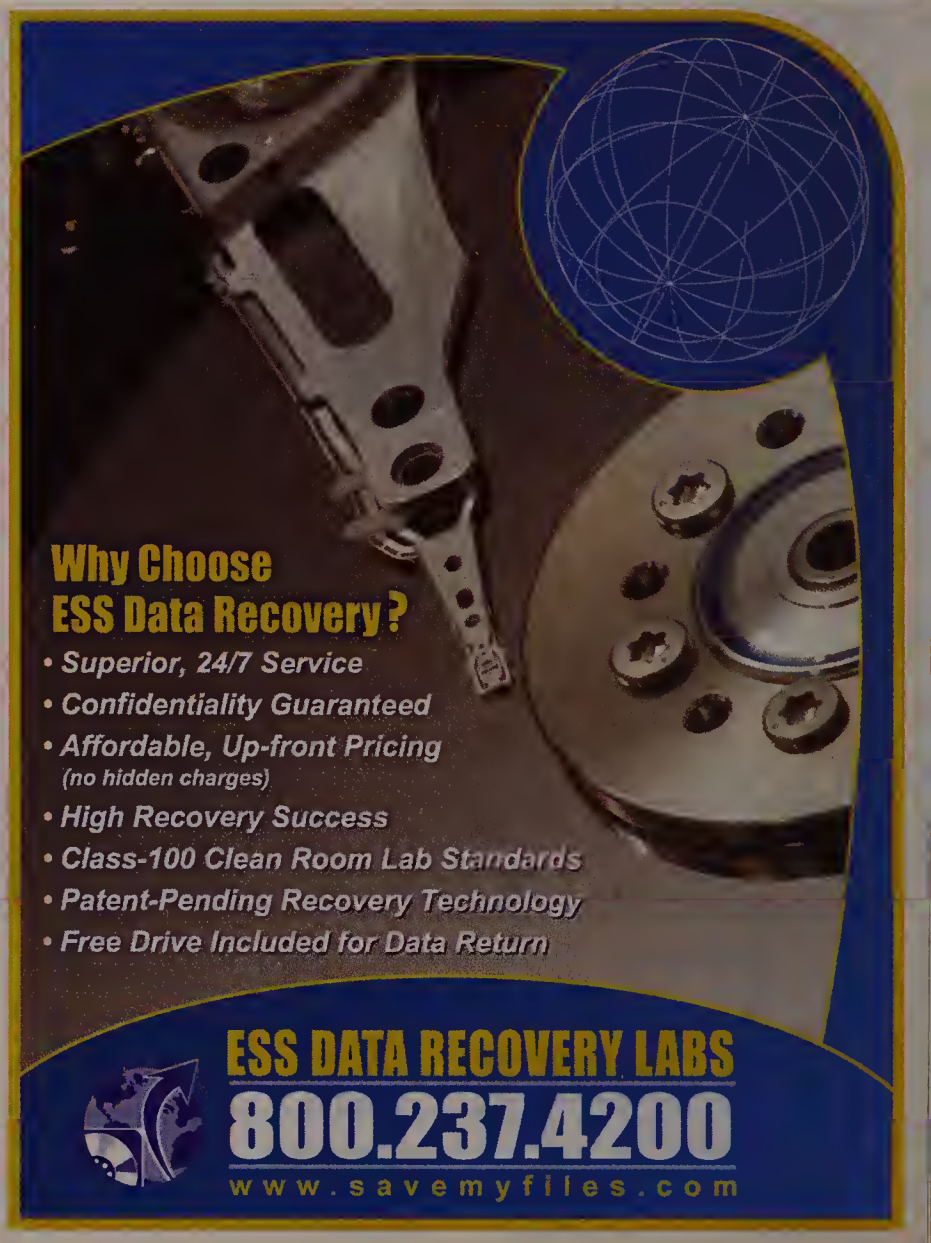
SUPER TRADE PRINTER

P: 877-782-2737 F: 877-972-9117
5900 San Fernando Road, Glendale, CA 91202

0612-0012

WHOLESALE
printing direct .com
www.wholesaleprintingdirect.com
premier online wholesale supplier of high quality printing
"There's no question why you're my printer of choice."
– Mary Miller | Marketing Manager
Fortune 500 Company
• Instant Pricing • Personalized Account Management
• Exceptional Offset Printing Quality • Wholesale Prices
Visit us online today!
SAVE 20%
See site for details. Use Promo Code: macworld27
www.wholesaleprintingdirect.com
Call us (Toll Free) at 1-866-298-8586 to find out more!

DATA RECOVERY: 800-440-1904
7 great reasons to choose DriveSavers:
■ Fast, advanced, proprietary techniques.
■ Recommended by all computer and hard drive manufacturers.
■ All operating systems; Mac, Windows, OS/2, Netware and UNIX.
■ All storage devices including flash memory, MP3 players, SAN, RAID and NAS systems.
■ Instantly retrieve recovered data with DataExpress™.
■ Government Contracts and High Security Service.
■ Featured in MacWorld, MacAddict, Forbes, CNN, BBC, New York Times, Popular Machanics and more.
DRIVESAVERS DATA RECOVERY
www.drivesavers.com
"We Can Save It!"
Visit DriveSavers at www.drivesavers.com
©2005 DRIVESAVERS, INC. 400 BEL MARIN KEYS BLVD., NOVATO, CA 94949 INTL: 415-382-2000

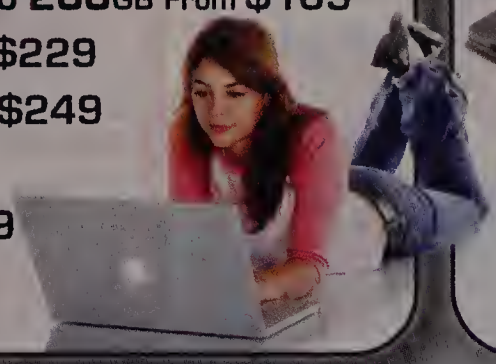

Why Choose ESS Data Recovery?
• Superior, 24/7 Service
• Confidentiality Guaranteed
• Affordable, Up-front Pricing
(no hidden charges)
• High Recovery Success
• Class-100 Clean Room Lab Standards
• Patent-Pending Recovery Technology
• Free Drive Included for Data Return
ESS DATA RECOVERY LABS
800.237.4200
www.savemyfiles.com

Overnight Repairs & Upgrades
MacBook • MacBook Pro • PowerBook • iBook

Overnight Service Only $79!

Overnight Hard Drive Upgrades Up To 200GB From $169
8x Dual-Layer SuperDrive Upgrades $229
Stainless Steel Hinge Replacements $249
Overnight LCD Repairs From $349...
Upgrade To A Glossy Screen For $79

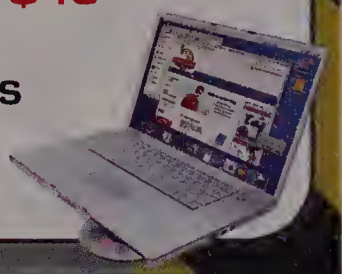
Overnight Door-To-Door Service Available



Amazing Deals On Mobile Products!

TinyD Ultra-Portable Aluminum USB 2 Drive - Up to 60Gb From $49

PowerBooks & iBooks From $399



Overnight iPod Repairs And Upgrades

Overnight Service Only $29!

iPod Screen Repairs From $49
Battery Upgrades From $19

Overnight Door-To-Door Service Available

DataRestore Overnight Data Recovery

Overnight Data Recovery Service - Only $49!

Laptops • Desktops • CDs • Memory Cards

New! Learn more at: techrestore.com/data

Overnight PSP Repairs & Upgrades

Overnight PSP Service $29 Includes Overnight Pick-up & Delivery!

PSP Battery Upgrades: Only $29
PSP Screen Repairs: Only $79

TechRestore help is on the way

TechRestore.com
1-888-64-RESTORE
8am - 5pm PST M - F: 1-888-647-3786

sharpdots.com

Your Online Resource For All Your Printing Needs

MACWORLD SUBSCRIBER
PROMOTION

RAPIDOTS BROCHURES

1,000 4/4
$169

Rapidots 8.5x11" brochures
100# book C2S gloss stock
4/4, aqueous coating
trifold or bifold.
More products available online.

Offer expires March 31, 2007

Enter coupon code: 0307BR for discount

RapiDots
Save time and money!
Bypass digital proof process
2-3 business day turnaround

1000	4/4	Business cards	$38
1000	4/1	4x6 Postcards	$64
1000	4/0	Bookmarks	$70
1000	4/4	5x7 Postcards	$87
1000	4/1	8.5x11 Flyers	$125

Go to www.sharpdots.com or call 877.742.7789

tradeshow-stuff.com™

www.tradeshow-stuff.com
800.969.9913

- banner displays
- tabletop displays
- popup mural graphic displays
- fabric panel & truss displays
- custom table covers

your source for everything tradeshow!

BIG POSTERS AT HUGE DISCOUNTS

2-3 DAY TURNAROUND
OTHER SIZES AND MEDIA AVAILABLE
LAMINATION & MOUNTING AVAILABLE

24" x 36" $25 NO MIN.
GLOSS, SATIN, MATTE FINISH

17"x22"...$12.50
36"x48"...$50
48"x72"...$125
60"x84"...$210
GLOSS, SATIN, MATTE FINISH

Learn more: Call or visit: BIGPOSTERS.COM
ASK FOR A SAMPLE PACK TO SEE AND FEEL THE QUALITY
Creative Juices Printing & Graphics 96 Gazza Blvd Farmingdale, NY 11735

1-888-880-HUGE

5000 4x6 POSTCARDS

$119*

FULL-COLOR DOUBLE-SIDED ON THICK 10 PT CARD STOCK

edgmiami.com
877.PICK.EDG
[877.742.5334]

*3-5 business days, shipping & graphics charges extra
Must mention Macworld Ad.

STUDENTS . EDUCATORS . SCHOOLS

Save up to 85% off retail pricing on thousands of software products.

Adobe
Creative Suite 2

~~SRP $1199~~
Save 69%
Save BIG

Macromedia
Studio 8

~~SRP $999~~
$289.98
Save $700

Quark
QuarkXPress 7

~~SRP $749~~
$189.98
Save $559

M-Audio
ProTools
M-Powered 7

~~SRP $349~~
$149.98
Save $199

Wacom
Intuos3 6x8
Tablet

~~SRP $349~~
$289.98
Save $60

PNY
1 GB Flash Drive

~~SRP $49~~
$29.98
Save $20

MakeMusic
Finale 2007

~~SRP $600~~
$279.98
Save $321

FileMaker
FileMaker Pro 8.5

~~SRP $299~~
$149.98
Save $150

Avid
Avid Xpress
Pro HD

~~SRP $1695~~
$295.00
Save $1400

Alias
Maya 8 Bundle

~~SRP $8589~~
$374.98
Save $8214

Newtek
Lightwave V9

~~SRP $795~~
$195.00
Save $600

Adobe
Production Studio

~~SRP $1699~~
Save 65%
Save BIG

journeyEd.com

1.800.874.9001

www.JourneyEd.com

WE BUY & SELL USED MACS!

Click for Best Prices on New Memory, Drives & Accessories!

SUPER DEAL!
PowerBook® G4 12"
1.33 GHz
256/60/Combo
only
$649!

SINCE 1994
MAC Solutions

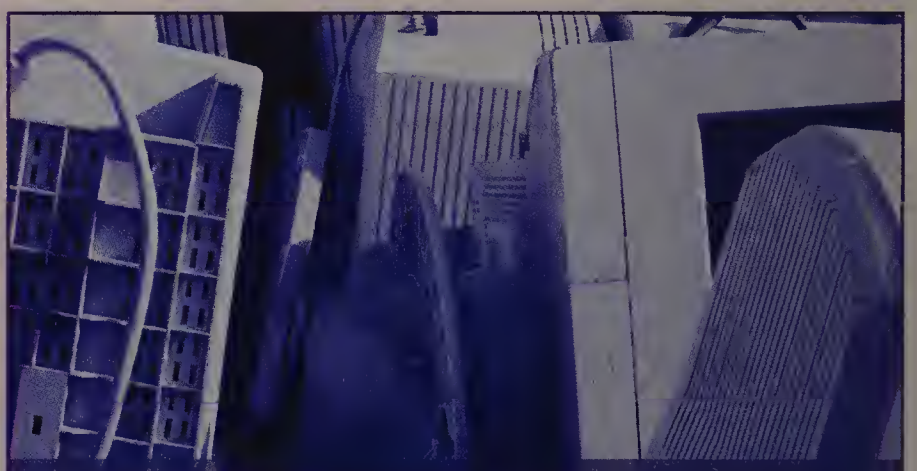
800·873·3726
11933 Wilshire Boulevard, West LA. CA 90025
Phone: (310) 914-3200 Fax: (310) 966-4433
MacSolutions.com

Mac® Prices

PCPrices.net/Mac

- Find the lowest price!
- Get the best bundles!
- Prices updated daily

Formerly MacPrices.com



Turn your computer clutter into cold cash!

WE BUY Apple Macintosh and other brand name laptops, desktops and servers. We buy from businesses, institutions and individuals. One unit or a thousand, working or not, contact us for a quote. **AND...**

WE SELL fully refurbished Apple Macintosh computers, providing you with a new computer experience at a used computer price.

Call us today **(800) 960-1140**

MicroReplay
www.microreplay.com

MicroReplay, Inc. 309 Walnut Street, Wellesley, MA 02481 - (781) 237-1140

High-Performance Mac Memory

Lifetime Warranty

Ramjet

Same Day Shipping

1-800-831-4569

Mon-Fri 9am-6pmCST

RAM Upgrades

iMac Intel

512mb - $69
1Gig - $125
2Gig - $249

MacBook

1Gig - $139
2Gig - $249

Mac Pro

1Gig - $249
2Gig - $445
4Gig - $885

MacBook Pro

512mb - $69
1Gig - $125
2Gig - $249

PowerBook G4 DDR2

1Gig - $125
2Gig - $249

G5 DDR2

1Gig - $129
2Gig - $249
4Gig - $575

Speak to a Memory Expert

Secure Online Ordering at

WWW.RAMJET.COM

1-800-831-4569

Professional, Fast, Dependable

800-227-3971

1200 Marshall St., Shreveport, LA 71101

We buy, sell, and horse-trade Macintosh

ShreveSystems.com

AmericasPrinter.com

The easiest way to print today.

"We use Americas Printer.com"

Presentation Folders starting at only $629

TriFold Brochures starting at only $179

Sales Sheets starting at only $99

Letterhead starting at only $129

Postcards starting at only $79

Business Cards starting at only $39

Catalogs starting at only $339

Doorhangers starting at only $179

OUR NEW STANDARD. THICKEST IN THE INDUSTRY 16pt C2S ON ALL HEAVY PAPER PRODUCTS

MIX'N'MATCH GLOSS UV COATING

FRONT: NO UV, FLOOD UV, SPOT UV

BACK: NO UV, FLOOD UV, SPOT UV

All full color offest Printing. All premium stock paper.

SeafoodByNet.com

Fresh from the sea to your doorstep!

Join our free Fresh Club Newsletter for daily fresh deals!

Visit www.SeafoodByNet.com or call 815-337-4028

Your store for restaurant quality seafood and meats.

- FREE Sample Kit!
- 2,000+ products in our Price Guide
- Great Pricing with Fast Turnaround
- 15,000+ Customers Nationwide
- Full Commercial Heidelberg Printshop
- Print & Ship Anywhere in the USA

We Accept

Preferred Shipping Carriers

800.552.1303 toll free

714.521.1100 CA | 714.521.5650 fax

6910 Aragon Circle, Buena Park, CA 90620

www.AmericasPrinter.com

Software Savings for Students, Teachers, and Schools!

Get up to 85% off retail software prices on the brands you know and use...

Adobe®
Creative Suite 2.3
Save! 67%
Order Today!
Design with the Best!

Wacom®
Intuos3 6x8"
Save! $40
Only! $289.95
Create Digital Artwork!

Quark®
QuarkXPress 7
Save! $560
Only! $189.95
Make Amazing Projects!

Alias®
Maya 8 Unlimited
Save! 85%
Only! $389.95
Become a 3D Animator!

We carry thousands of industry-leading software and hardware products at huge discounts for students and teachers. These special prices are for the academic community ONLY and are typically $10-$20 lower than most college bookstores! We also carry backpacks, ipod accessories and more. Shop today and save!

Adobe®
Acrobat Pro 8.....**Save 69%**
Photoshop CS 2.....**Save 52%**
Flash Pro 8.....**Save 66%**
Studio 8.....**Save 71%**

Wacom®
Graphire4 6x8"Tablet.....**$169**

Pantone®
Pantone Essentials.....**$159**
Color Bride (coated).....**$54**

Total Training®
Acrobat 8 Pro Training.....**$229**
Photoshop CS2 Training.....**$99**
Dreamweaver 8 Training.....**$119**
Creative Suite 2 Training.....**$349**

NewTek®
LightWave 3D 9.....**$195**

Corel®
Painter IX.5.....**$95**
CorelDRAW Graphics Suite X3...**$95**

Native Instruments®
Kontakt 2.....**$179**
Guitar Rig 2.....**$329**

M-Audio®
Pro Tools 7 M-Powered.....**$149**
Ableton Live 6.....**$279**

Sibelius®
Sibelius 4.....**$239**
Auralia 2.1.....**$89**

FileMaker®
FileMaker Pro 8.5.....**$149**

Microsoft®
Office 2004 Student/Teacher....**$139**

Hey Parents!
You you are eligible to buy for your students at home or away at school.

Prices subject to change at any time.

Give us a call toll free! 1-800-218-7455

MW.AcademicSuperstore.com

ACADEMIC SUPERSTORE

WWW.MEMORY SOLUTIONS.COM

We've got all the memory solutions you need for: 800-462-2160

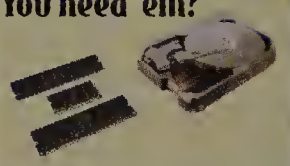
Mac Pro® • MacBook Pro® • MacBook® • Power Mac®
PowerBook® • iMac® • iBook® • eMac® • Mac Mini®

Samsung memory available

2gb 667MHz DDR2 ECC FB-DIMM* for Mac Pro	$339
1gb 667MHz DDR2 ECC FB-DIMM* for Mac Pro	149
2gb 5300-667 for MacBookPro/Intel Macs	499
1gb 5300-667 for MacBookPro/Intel Macs	99
1gb 4200-533 for Dual Core G5	89
1gb 3200-400 for Dual Processor G5	89
1gb 2700-333 for PowerBook G4/iBook G4	109

* FB = Fully Buffered

You need 'em?



We've got 'em!

Note: Prices are subject to change.
Check our website for the most up-to-date info.

Quantities limited to stock on hand. School P.O.'s welcome.

FatCow

Call us Today!
1.866.544.9343

Uniquely Good Web Hosting
Only from FatCow.

Original FatCow Web Hosting Plan
- 15 GB of Disk Space for Your Files
- 150 GB of Monthly Data Transfer
- 1500 E-Mail Accounts
- Easy-to-Use Site Building Tools
- Online Store

$99 a year

MiniMoo E-Mail Plan
- 1 Mailbox
- Unlimited E-Mail Forwarding
- E-Mail Auto Responders
- Spam & Virus Filters
- 1-Page Web Site

$5 a year

All plans come with a 30-day money-back guarantee!

Visit us today. www.fatcow.com/macworld

MEGAMACS.COM

Your Source for MegaMac Deals since 1995
(918) 664-MEGA (6342)

MACS WANTED
(the more the better)
Email your specs to
purchasing@megawatts.com

Mac Systems

AC Adapters $34

iMac G3	@ $39	iBook G3	@ $329
PowerMac G4	@ $239	iBook G4	@ $599
iMac G5	@ $799	PowerBook G4	@ $699
PowerMac G5	@ $999	AirPort	$79 / $39

Software

.mac 4.0 Family $99

OS X.4 Server 10 User $449

MindManager 6 $169

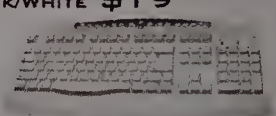
FastTrack 9 $249

Apple MacOS X.3 Server Panther Unlimited Client $127

Final Cut Express HD 3.5 $149

USB Items

Powermate
Studio Mouse $24
Black/White $19



Kensington Keyboard Part 64351 $15
Keyboard w/ Studio Mouse $24
USB Cable 3Ft/6Ft $1/$2
Memory Stick Reader $4
7Port USB Hub $14
Edirol USB to Midi $24

Prices based on availability. Subject to change, and rounded down

FIND THESE DEALS AT MEGAMACS.COM/MACWORLD

POWERMAX.COM

Call the Mac Experts!

800-613-2072

local: 503-624-1827
fax: 503-624-1635
email: sales@powermax.com
Authorized Reseller

Chill Out with PowerMax!

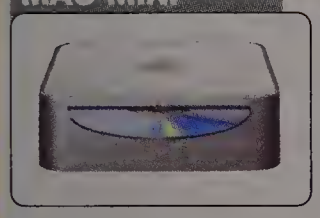
FREE* MP3 sunglasses with any new or refurbished Mac!

Perfect for hiking, biking, skiing or just lounging by the pool, these stylish 512MB USB glasses filter out all UVA/UVB rays and conveniently flip up when not in use. Complete with carry case, USB cable and even a **digital voice recorder!**

Buy Any New Mac and Get:

$75 RAM Rebate*
Free Shipping
Free MP3 Sunglasses*

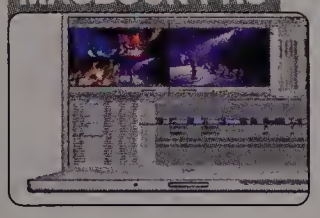
MAC MINI



Don't let its small size fool you -- the Mac mini is fast! We have various configurations and price points available.

PRICES START @ $559

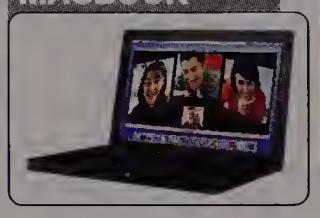
MACBOOK PRO



Need portability and unsurpassed power? The MacBook Pro is for you! Choose from 15-inch and 17-inch screen sizes.

PRICES START @ $1549

MACBOOK



Now with a more powerful Intel Core 2 Duo processor, the MacBook is a great choice for the student or professional.

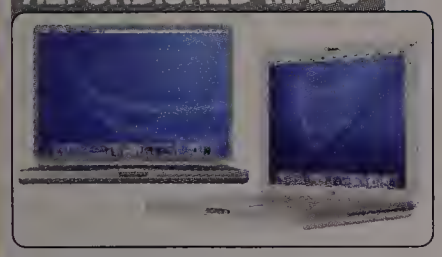
PRICES START @ $939

IMAC

The stunning iMac is even faster and is available with a 24" screen. It comes in 17" and 20" screen sizes, too!

PRICES START @ $995

REFURBISHED MACS



PowerMax has a great selection of factory refurbished Macs. Call or go online for the latest inventory!

14" iBook G4/1.33GHz --
256MB RAM/60GB HD/Combo Drive ..$949.00

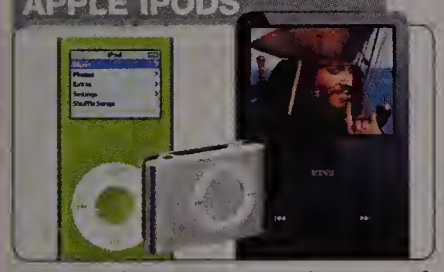
13" MacBook 2.0GHz Core Duo (white) --
512MB RAM/60GB HD/SuperDr......$949.00

15" PowerBook G4/1.5GHz --
512MB RAM/80GB HD/Combo Dr. $1149.00

15" PowerBook G4/1.67GHz --
512MB RAM/80GB HD/SuperDrive. ...$1349.00

15" MacBook Pro 2.16GHz Core Duo --
1.0GB RAM/100GB HD/SuperDrive. ...$1599.00

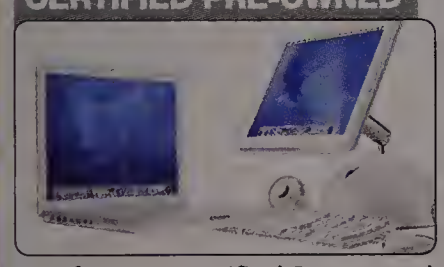
APPLE IPODS



Choose from a huge selection of new, used a refurb iPod from the web's iPod leader -- **PowerMax!**

iPod shuffle 1GB in stock! $79.00
iPod nano 2GB silver.....$149.00
iPod nano 4GB slvr, pink, grn, blue...$194.00
iPod nano 8GB black $244.88
Refurbished iPod 20GB color display ..$158.88
Refurbished iPod Photo 30GB $178.88
Refurbished iPod 60GB color display .$199.88
iPod 30GB black or white $244.88
iPod 80GB black or white $338.88

CERTIFIED PRE-OWNED



Our famous **Certified Pre-owned Macs** are inspected, bench-tested & come with a 90-day warranty.

CRT iMac G3/350MHz
64MB RAM/6GB HD/CD-ROM $74.99

Power Mac G4/500MHz Dual
256MB RAM/40GB HD/DVD-RAM....$459.00

12" iBook G3/900MHz
640MB RAM/40GB HD/Combo Drive $669.00

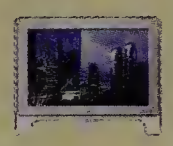
17" LCD iMac G4/1.25GHz
768MB RAM/80GB HD/SuperDr.....$969.00

17" PowerBook G4/1.0GHz "Aluminum"
1024MB RAM/60GB HD/SuperDr ...$1299.00

After Christmas CLEARANCE!

Huge savings on your favorite items!

Pre-Owned 23" Apple Display with ADC!



JUST $688.00

JBL On Tour Speakers

Crisp highs and powerful low end

JUST $49.88

Dane-Elec zMate Flash Drive

USB 2.0 - 512MB capacity

JUST $18.88

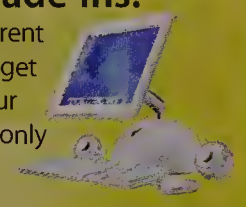
Dr. Bodelin's Optical Mouse

Available in multiple styles

JUST $9.99

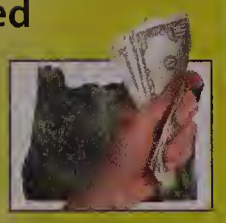
We Take Trade Ins!

Trade in your current Mac or iPod and get credit toward your next purchase -- only at PowerMax!



We're Located in Oregon!

The land of friendly people, trees, high-tech & **No Sales Tax!**



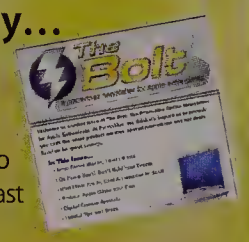
Visit the PowerMax Outlet Store!

Great low-dough deals on your favorite products

Save Money...

Subscribe to The Bolt !

Our online newsletter dedicated to the Apple enthusiast

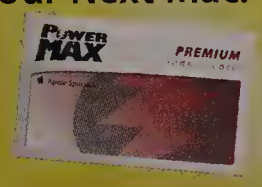


Expand your Knowledge

Check out our extensive selection of technical articles, product reviews and FAQs

Finance Your Next Mac!

Get 90-days same-as-cash financing on your next Mac purchase! order -- apply today!



Prices subject to change without notice. Credit card orders strictly verified against fraudulent use. With use of credit card as payment, customer acknowledges that some products are subject to final sale. Many prices are limited to stock on hand. All brand names are registered trademarks of their respective holders. Not responsible for typographical errors. *after mail-in rebate(s). Some restrictions apply. Mac mini not valid for $75 RAM rebate.

Hot Stuff

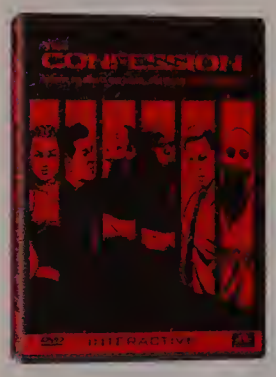
Our Favorite New Stuff

FROM THE EDITORS OF MACWORLD

USBCELL

Walk into any drugstore or market, and you'll still find a lot of alkaline batteries destined for the landfill. Standard rechargeable batteries for your remote controls and portable speakers have been widely available for years, but all of them require a charger to keep the power flowing. If you're interested in something a little different, check out Moixa Energy's USBCell batteries. As the name suggests, you recharge these cells by plugging them into any powered USB port on your computer, monitor, or hub. Moixa's first product is a pack of two nickel-metal-hydride (NiMH) AA batteries that costs about $20 in the United States (www.usbcell.com).—JONATHAN SEFF

Film School in a Box

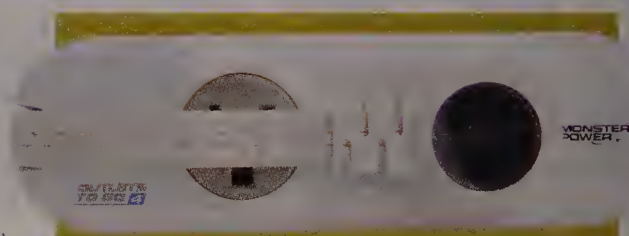


For their movie, *The Confession,* filmmakers David Kebo and Rudi Liden used 11 simultaneously running security cameras to film the action. The resulting 90-minute DVD lets the viewer switch among the different angles to remix the movie on-the-fly. Not stopping there, the two turned their film noir footage into Film School in a Box, a toolkit for people looking to hone their film-editing skills, using Final Cut Pro 5 and its multicamera feature. The Gold Edition ($300) includes a six-camera multiclip of the movie; 11 different camera angles of the film sorted, binned, and ready to import into Final Cut Pro; a shooting script; a camera reference map; a bonus angle; and the director's cut of the movie—all on a 250GB FireWire drive. The Platinum Edition ($500) includes the same but bumps the multiclip up to nine cameras, adds an extra bonus angle, and ships on a 500GB LaCie d2 Big Disk Extreme with USB 2.0, FireWire 400, and FireWire 800 connections (www.filmschoolinabox.net).—JONATHAN SEFF

RiffTrax

Mystery Science Theater 3000 (MST3K) is one of the funniest TV shows of all time. Its premise was simple: three funny people (OK, one funny person and two funny robot puppets) joined you in watching a terrible movie, and then cracked jokes that made the whole thing more than bearable. The show has been gone for a decade, but its spirit lives on in the form of RiffTrax, a series of $1 to $4 movie commentaries in MP3 format designed to be played back in sync with the DVD they're commenting on. All RiffTrax commentaries feature Mike Nelson, the head writer and host of *MST3K,* and many also include other *MST3K* personalities. But unlike that series, which satirized only movies it could acquire the TV rights to, RiffTrax proudly lampoons 20 major motion pictures such as *Star Wars: Episode I, The Fifth Element,* and *X-Men*. I rented *Top Gun* and watched it while the RiffTrax commentary played back on a set of iPod speakers—and I laughed more than I have in ages (www.rifftrax.com).—JASON SNELL

RIFFTRAX™



Outlets to Go

You're on the road, and outlets for plugging in your laptop and iPod charger are scarce. But Monster Cable's compact Outlets to Go power strip can expand your options by converting a single outlet to four outlets ($20; available in white) or six outlets ($30; available in white, silver, and black). Unlike the cheap outlet multipliers you'll find at your local hardware store, the Outlets to Go power strip includes a built-in circuit breaker to prevent overloads. Each outlet is spaced widely enough to accommodate bulky power-brick adapters, and the built-in flat extension cable (11 inches or 16 inches long, respectively) wraps conveniently for travel (www.monstercable.com).—DAN FRAKES

LaCie Hub

The best products elegantly combine form and function—but I'm a sucker for those that gleefully flaunt their design. Looking something like a giant light bulb that has escaped from a *Matrix* movie set, the $80 LaCie Hub has dramatically reinvented the idea of the computer peripheral hub. As with most things that aspire to be artistic, reaction is sure to be mixed. I took a very informal poll around the *Macworld* offices, and about half the people I approached were wowed by it, while the other half rolled their eyes at me. Sporting two FireWire 400 ports, four USB 2.0 ports, eight color LEDs, and—yes—a small fan and a light, the Hub may not win any awards for practicality. But it will undoubtedly make me smile at least once during a typical workday (www.lacie.com).—ERIC SUESZ

USBCELL PHOTOGRAPH BY PETER BELANGER

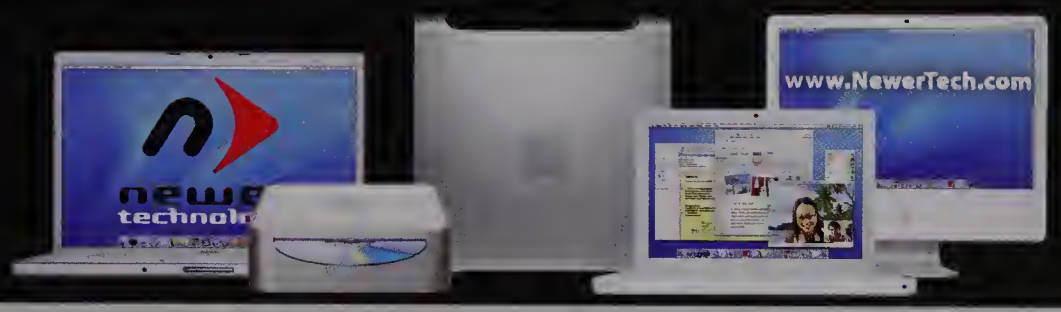
Pick Your Partner.

miniStack™ V2

Whisper Quiet Operation • Extra Ports • Lots of Storage

"Creative cooling, sleek design, extra ports, OS X bootable and a fast hard drive make this a welcomed addition to any Mac..."

- MacMod



*Expand your storage capacity and port flexibility while decreasing your desk/cord clutter. The Newer Technology, Inc.™ **miniStack™ V2** is the perfect external drive and bus powered hub partner for your Mac!*

80GB to 750GB **from $99.00**

"Add Your Own Hard Drive" 0GB kits **from $49.99**

The NewerTech **miniStack™ *V2*** - With up to 750GB of 3.5" drive space, there's plenty of storage space for music & video files, graphics & photos, and document backup while the 2 FireWire® and 3 USB 2.0 ports enable connection of scanners, printers, memory card readers, digital cameras, and iPods® – all at once!

Only 6.5" x 6.5" x 1.5"

Macworld Top Product

MacAddict Rated GREAT

2004-2005-2006 Circle of Excellence Gold Honoree 1 of just 28!

123Macmini.com Accessory of the Year

EDITORS' MacAddict CHOICE

MacAddict RATED GREAT

MacMod

Visit our website to check out our full line of external storage solutions and other accessories.

To purchase NewerTech products visit distributor:

Other World Computing

Serving the Computer Universe since 1988

Visit www.MacSales.com/storage 800.275.4576

"80GB model covered by 2 Year NewerTech Full Solution Limited Warranty + 1Year Additional(Total 3 Years) Hard Disk Manufacturer Warranty; 160GB to 750GB covered by 2 Year Full Solution Limited Warranty + 3 Additional Years(total 5 years) Manufacturer Warranty on the Hard Disk inside.

MW_03_07 Other World Computing, 1004 Courtaulds Dr., Woodstock, IL 60098

Prices, specifications, and availability are subject to change without notice. Items returned within 30 days may be subject to a restocking fee. No return will be accepted without Return Merchandise Authorization number.

miniStack is a trademark of Newer Technology, Inc

IPod is a registered trademark of Apple Computer Inc. FireWire is a trademark of Apple Computer Inc.

INSPIRED IN DESIGN. INSPIRED IN PRINTING.

You design because you're inspired. It shows in your best work. And your prints should express every ounce of that inspiration. That's why the new HP Z series printers produce breakthrough color accuracy via a built-in spectrophotometer that analyzes color and calibrates it to match the media used. So you get accurate and consistent color print to print, media to media. And creating ICC color profiles is quick and easy. Plus the Designjet Z2100 boasts 8 Vivera pigmented inks that can match almost every color in the spectrum—for brilliant comps, layouts, contact sheets, mockups or exhibition prints. Do your inspirations justice like never before.

HP PHOTOSMART PRO B9180*
13" x 19" 8 Vivera pigmented inks desktop printer

HP DESIGNJET Z2100*
24"– 44" pedestal printer with 8 Vivera pigmented inks

HP DESIGNJET Z3100*
24"– 44" pedestal printer with 12 Vivera pigmented inks

Get up to $1,000 cash back and up to $500 in free media when you purchase a new HP Designjet Z Series Photo Printer with HP Extreme Upgrade![1]
Details at www.hp.com/go/extreme8

*Mac and PC fully compatible. [1]U.S. residents only. Cash back provided by mail-in rebate available for eligible purchases made February 1, 2007 through May 31, 2007. Free media available [illegible]. Additional restrictions apply. Void where prohibited, taxed, or restricted by law. For qualifying product options, terms and conditions, and claim form, visit www.hp.com/go/extreme8.

© 2007 Hewlett-Packard Development Company, L.P. All rights reserved. The information contained herein is subject to change without notice. Some of the images are simulated.